Registered at the G.P.O., Sydney, for Transmission by Post as a Newspaper. Published Weekly.

THE

MEDICAL JOURNAL OF AUSTRALIA

(With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association

VOL. I.—6TH YEAR—NO. 8. SYDNEY: SATURDAY, FEBRUARY 22, 1919. PRICE 6D.

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THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. I.—6TH YEAR. SYDNEY: SATURDAY, FEBRUARY 22, 1919. No. 8.

An Address.[1]

By **D. H. E. Lines, M.B., Ch.B. (Melb.),**
Retiring President of the Tasmanian Branch of the British Medical Association.

I suppose the first thought arising on any occasion like this is one of great thankfulness that hostilities have ceased in the great four years' struggle that has been going on in Europe, with its ghastly toll of lives and its removal of so many we have known and loved, but that also has had many lessons for us as members of the medical profession.

As my period of office as President of this Branch of the British Medical Association has now drawn to a close, and as it is customary for the retiring President to give an address, I feel it incumbent on me to follow the beaten track to some extent. My knowledge of medicine and surgery is not wide enough to warrant my attacking in this address medical or surgical problems with any great amount of benefit to my hearers, whatever the benefit may be to myself. And I have neither the ready tongue nor pen which would justify me in airing my views on general subjects at great length. So, by acknowledging some of my deficiencies, I hope to get the indulgence of you all for the few remarks I am about to place before you.

I would just like to tell you that I have keenly appreciated the honour I had twelve months ago in being voted to this chair. I recognized when I became President of this Branch that there were stormy times ahead, and I also recognize the fact that I should have done much more to justify your choice, but can only bring forward the well-worn, but not satisfactory, excuse that one leads the busy life of a general practitioner and that many matters of great urgency and importance have cropped up and to some extent have shaped themselves.

I would like at this point to assure this meeting that I have never had the pleasure of working with men who have tried to do their duty more than the members of your Council. Much time has been spent in discussing momentous questions, and much thought was given before decisions were come to. We have lately been meeting every fortnight, and even weekly, and still we could not quite keep abreast of the work.

It is now going on for two years since the hospital dispute came to a head, and apparently the profession, or at least the British Medical Association, has got nothing but abuse out of it. But it is apparent only as we know we have got support and solid support, too, in more than one quarter, and we have proved the loyalty of the great majority of the profession. As you know, the Government got its *Hospital Bill* through both Houses of Parliament with no modification of its obnoxious allowance of rich as well as poor taking advantage of honorary service of medical men. That is the rock on which we originally split. We have never departed from the stand we then took, and in that stand we have the support of the British Medical Association as a whole, at any rate. And the dispute is not by any means at an end. I feel we must never sacrifice our principles, and those principles include the keeping of charitable institutions for those who are poor or who are, at any rate, unable to pay ordinary medical, surgical and nursing fees. If the well-to-do want to consult a hospital medical man I should think that the time had come for that medical man to leave his resident position, to turn out and battle for his living, and not to hold a position indefinitely where he is farmed out by a Government for profit.

I do not want to discuss this subject *ad nauseam*, but I will pass on to another matter closely connected with it. I, of course, refer to the amendment of the *Medical Practitioners Act*, which was rushed through during the last hours of a dying Parliament. It contains, as you know, many objectionable features. The first is that the number of medical men constituting the Council is to be reduced, for it may consist of five, but not more than nine members. It remains to be seen which number will be appointed; but one thing must be borne in mind by members of our Association in this respect, and that is, if a member or members of the British Medical Association are appointed, the acceptance of the position would appear to be a proper thing, as by that means we could keep in touch with what goes on at that Board, and, as one of our members points out, the office could be given up if the position became intolerable. The second great objection to this Act is that it legalizes all medical practitioners who were on the register on July 31 last. Well, 99% of medical men in Tasmania do not want legalizing, and if 1% want white-washing, why not have passed a special Bill for the 1%?

The third point I would like to mention is that this Act provides for admission of medical men who have done a four-year course only. Is this fair to the Australian and British medical student, who must do a five years' course at least, and when it is in the air that some of the courses will be increased to six years! It also provides that the hall-mark shall be placed in the hands of a non-statutory body analogous to the British Medical Association. And yet the evidence of the secretary of that body—the American Medical Association—is not good enough for acceptance by a Royal Commissioner in Tasmania, but the evidence of men who signed a diploma called into question was good enough for acceptance. And yet again, any prior condition of reciprocity is thrown overboard.

Can you wonder, then, that we strove to oppose the Bill? One can but sigh for the days when we had medical men in parliament, like Sir Ivo McCall and the late Hon. Dr. Butler; I think they at least would have done their utmost to have prevented such panic legislation being rushed through both Houses in twenty-four hours.

This brings me to another important point. As the *British Medical Journal* has it: "The medical profession agrees that it requires a louder and clearer parliamentary voice. The ideal medical man in parlia-

[1] Delivered at the Annual Meeting of the Tasmanian Branch of the British Medical Association on January 28, 1919.

ment should not represent medicine only. He should be the interpreter of medical thought and aims to his fellow-legislators. He can conform to party politics and can keep his necessary pledges while remaining faithful to ideals outside and above such pledges." I see also that recently Dr. Addison, the Minister of Reconstruction in the late British Parliament, was to address a meeting, the object of which was to secure the election of representative medical men to the House of Commons, so that expert advice might be available on vital questions concerning the national health.

Why should we not try with all our might to get such representation in our State and Federal Parliaments?

One great matter that is engaging the attention of many minds at the present time is the so-called nationalization of medicine. It is a subject that demands earnest study. There are so many things to be considered. For instance, is it wise that such an intimate and confidential relationship as exists between a doctor and his patient should be disturbed by bureaucratic administration? What is to become of the rank and file of medical men who are at present practising and who have learned the hard lesson of waiting, after perhaps having spent their all in acquiring a sound medical education? Would such a scheme, for instance, start with the education of a boy and carry on his training as a medical man till he qualifies and becomes the property—body and soul—of a government department? Will the return of so many young medical men from the various theatres of war hasten the scheme? Will adequate provision be made for research? For, without that it would seem that any scheme of nationalization would be doomed to failure. Again, will nationalization tend to do away with the stimulus of competition? Will the profession get into a rut? Will it remain there? Pitfalls abound, and I commend to your best consideration the pronouncement of the Federal Committee on this matter.

I have nearly finished; but there are still one or two subjects I would like to mention. We have been through such a strenuous time the last two years medico-legally and medico-politically that I am afraid we have been losing sight of a very important point, and that is that this Association has for one of its great objects the holding of clinical discussions. I would earnestly commend the attention of all to this aspect of the objects of our Association. I hope the new Council will give its attention to the urging of members to bring even everyday cases before the regular meetings. We must keep our end up in all ways. We must do our best to keep our Branch a live Branch. We know the British Medical Association is recognized by not only the profession as being a power in the land, but it is also so recognized by the public and by Parliament. It must have been gratifying to all of us, I think, that the Acting Prime Minister of Australia should have shown his confidence in the British Medical Association by inviting the Presidents of the various Branches to attend such an important conference as that recently held in Melbourne to consider the pneumonic influenza outbreak. And, above all, we must be united. I was more than pleased to see in Dr. Espie Dod's address to the Queensland Branch the following statement: "If a stimulus is needed to weld us together and make us take more interest in our Association, surely we have such a stimulus in the action recently taken by the Tasmanian Government, an action which we cannot believe could have been taken by any Government which had the welfare of the public at heart, for the introduction of graduates of a lower standard will not only tend to lower the profession, but will primarily and principally injure the public."

Lastly, I think it would be a graceful act on the part of this Branch to acknowledge the help that the Secretary of the American Medical Association has so promptly given when asked on matters of medical interest that have been submitted to him.

Gentlemen, I thank you for listening to this sketchy address, and I thank all for bearing with many shortcomings of mine during my holding the office of your President, and it now only remains for me to leave this chair and ask your actual President, Dr. Giblin, to take it. You have in Dr. Giblin a medical man who is a hard worker, a man of high ideals in his profession, and one who has the respect of his fellow-men.

A PRELIMINARY REPORT OF THE RECENT "INFLUENZA" EPIDEMIC IN DUNEDIN, NEW ZEALAND.[1]

(From the Medical School, Otago University.)

CLINICAL.

By **F. Fitchett, M.D.,**
Lecturer on Materia Medica and Clinical Medicine;
and
J. T. Bowie, M.B., D.P.H., D.T.M.,
Tutor in Medicine.

In Dunedin, as elsewhere in New Zealand, the recent epidemic of influenza spread so rapidly amongst the population and quickly became so virulent that medical men were overwhelmed with work and found it impossible to record cases fully. We have, however, notes of a large number of cases, which we purpose analysing with a view to a more exhaustive publication at a later date and in the meantime we give in this preliminary note our general impressions of the salient features of the epidemic.

The first cases definitely diagnosed as influenza occurred late in September. These were of the ordinary respiratory type, showing catarrh of the upper air passages, but with no pulmonary involvement. In the first week of November a few cases with lung complications were seen and on the 11th of the month many cases were reported. Then, with explosive suddenness, a large proportion of the population was attacked; virulent cases streamed into the hospital in dozens and our resources were taxed to the uttermost.

In the course of the epidemic the cases that came under notice during the first ten to fourteen days differed in appearance from those seen later, and the difference seemed to be sufficiently distinct to warrant us in recognizing two types of the disease, probably with different bacteriological bases. We describe, therefore, two groups of cases—an "early epidemic group" and a "late epidemic group."

[1] The bacteriological and pathological portion of this article, by Professor S. T. Champtaloup and Professor A. M. Drennan, has been published in *The Medical Journal of Australia* of January 25, 1919, pages 63-65.

Early Epidemic Group.

The characteristic features of the early cases were: violent delirium, cyanosis, and intense inflammatory engorgement of the lungs, passing on to œdema. On physical examination percussion was unimpaired, the air entered badly (breath sounds being sometimes inaudible) and adhesive, sticky crepitations were heard on deep inspiration, to begin with at one base only (usually the left), but often extending later to both lungs. The progress of the pulmonary involvement could, in many cases, be followed from base to apex on one side and then to the other lung; but in some cases œdema appeared with dramatic suddenness in both lungs simultaneously. As the œdema supervened the crepitations became coarse and bubbling, and the patient's distress was extreme. The adhesive nature of the exudate rendered cough ineffectual, violent paroxysms of coughing resulting in the expulsion of only small pellets of sticky, yellowish sputum. In a few cases large quantities of white, frothy spit were expectorated. The sputum was often freely blood-stained, at times assuming the characters of an hæmoptysis. The appearance of these patients was distressing in the extreme. They died of asphyxia, being drowned in the fluid they could not expell. The pulse generally remained full and strong, and only moderately accelerated almost to the end, the immediate cause of death being respiratory failure.

The delirium, which was such a striking feature in these cases, was remarkable in its violence, being in many cases quite maniacal, and was anomalous in that often it did not appear until the temperature began to fall; many wildly delirious patients showed a normal temperature.

The cyanosis was often extreme, and in many cases seemed to be out of proportion to the amount of lung tissue involved. In a few cases it was curiously intermittent, the patient at one time being deeply cyanosed, then showing a good colour, and again becoming cyanosed, all within a few hours. We shall attempt to explain this in our subsequent paper.

The circulation, as a rule, did not appear to be injuriously affected. The pulse-rate was relatively slow, and frequently patients, who otherwise seemed to be *in extremis*, showed a strong, steady pulse.

Late Epidemic Group.

The cases in this group were characterized by milder delirium and by more definite evidence of pneumonia. Œdema of the lung was not such a prominent feature, but it usually supervened before the end in fatal cases.

The physical signs of pneumonia were readily recognized in most cases. Two varieties were present: (1) broncho-pneumonia, in which the physical signs were usually restricted to a patch or patches of bronchial breathing with crepitations, and without impairment of percussion; and (2) lobar pneumonia, with definite involvement of a whole lobe.

Physical signs alone did not always serve to distinguish these varieties, for sometimes the broncho-pneumonia was massive, involving practically a whole lobe, thus simulating lobar pneumonia; and, again, the signs in the lobar variety did not usually conform to those met with in ordinary croupous pneumonia. For example, impairment of percussion was sometimes consistently absent when loud, high-pitched tubular breathing was present over a whole lobe: and, again, bronchial breathing without accompaniments (as met with in massive pleural effusions) was observed for many days together. Surer guides to the nature of a case were the temperature curve, the course of the disease, and the character of the sputum.

In the broncho-pneumonic variety the temperature curve was irregular, moderate as regards elevation, and fell by lysis; the course was indefinite, and the sputum greenish-yellow, nummular and seldom blood-stained. In the lobar pneumonia variety the temperature was always high (40° C.), sometimes very high (40.8° to 41° C.), and continued, the curve showing only slight variations; the course was more definite, usually eight to ten days, sometimes twelve days, and, as a rule, the termination was by crisis. The sputum was invariably rusty. In many cases both lungs were affected. Pleuritic pain was rare.

In both varieties the face wore a dusky flush, quite distinct from the bright-red flush of ordinary pneumonia, and sometimes this deepened to cyanosis. Often the first indication that an uncomplicated case of influenza had developed pneumonia was the appearance of this purplish flush upon the face.

In a few cases of the lobar variety, with characteristic signs and symptoms, the course was abortive, the temperature reaching normal by crisis in 48 or 72 hours.

Convalescence in both epidemic groups was prolonged and tedious. In the pneumonic cases resolution of the lung was slow, bronchial breathing being present in some cases weeks after the temperature had reached nomal, and the sputum continuing rusty for a fortnight.

In women menstruation was almost invariably present. It was usually out of time, and appeared with the onset of the disease.

Pregnancy was present in a number of cases. As a rule these patients aborted or miscarried, and did badly; but two or three pregnant women recovered with a living child after a severe attack.

Herpes on the lips and nose was seen in many cases, and in two cases rose-spots identical with those of typhoid fever were seen on the abdomen. In these cases the spleen was not palpable and the Widal reaction was negative.

Many cases showed albumin in the urine.

The following conditions were met with as complications: empyema, pyæmia, *otitis media*, gastro-enteritis, hæmorrhages from nose and bowel, jaundice, parotitis, strabismus, abscess of lung, meningitis, laryngitis with aphonia (usually a late manifestation).

The epidemic subsided almost as rapidly as it began, and the latest cases admitted conformed more in type to the earliest, pre-epidemic, cases.

Treatment.

Absolute rest of body and mind we found to be of the first importance in treatment. This in the early days of the epidemic was difficult to secure, as numerous daily admissions of serious and wildly delirious patients to a hospital depleted of its trained nursing

staff, necessitated frequent re-arrangement of patients and the noise and confusion resulting militated against sleep. But the more we were able to refrain from moving patients, and to impress upon our voluntary workers that noise was injurious and to secure sleep to the patients by the maintenance of quiet and by the use of suitable drugs, the greater was the measure of our success in treatment. Movement had often an injurious affect. Even careful removal of a convalescent patient to another ward not infrequently resulted in a relapse. So jealous were we of disturbing patients that we reduced physical examination to a minimum.

Position we think important. Apart from the advantage afforded by the Fowler position in facilitating breathing, we believe that this position has an important influence in preventing the spread of the disease from base to apex of the lung. We were led to this conclusion both by observation of post-mortem findings and by clinical evidence, which served to show that gravity influences the extension of the disease. As far as possible, with the nursing facilities available, our patients were kept strictly in the Fowler position. With delirious patients this was not feasible and the head of the bed was raised on high blocks instead.

In our attempt to combat the disease the following drugs and other therapeutic agents were used: quinine was extensively used, chiefly in the form of the Burney Yeo quinine-chlorine mixture. At first we were favourably impressed, several cases seeming to benefit, but a wider experience made it doubtful if the course of the disease was modified by the use of quinine, and the drug was discarded. In several cases of severe pneumonia of the lobar type quinine hydrochloride was given in 0.6 gramme doses every two hours for four doses. In two of these cases the temperature promptly fell several degrees, and the course of the disease seemed to be favourably influenced, the patients ultimately recovering. But the results, as a whole, were not sufficiently striking to encourage an extensive usage in this connexion.

Sodium salicylate or aspirin was administered as a routine measure in all early uncomplicated cases. The pains and discomforts of the patients were relieved and the temperature often fell, but the course of the disease was not influenced favourably, nor were complications prevented.

Vaccines.—In about twenty-five selected cases a vaccine, consisting of *B. influenzæ*, epidemic diplococcus, pneumococcus, streptococcus and *Staphylococcus pyogenes aureus*, isolated from recent cases, was administered on admission and before the appearance of complications. No beneficial results followed this line of treatment and it was abandoned. The sudden, overwhelming onset of the epidemic precluded the use of vaccines as a prophylactic measure.

Serum from convalescent patients.—Early in the epidemic the question of administering serum from persons who had recovered from a sharp attack was considered, but it was found impossible, under the adverse conditions, to carry out the necessary Wassermann and hæmolytic tests; moreover, there was difficulty in procuring the relatively large quantity of serum required for each case. Two cases, however, were treated in this way, but with no apparent benefit. The importance of applying the Wassermann test was shown by the fact that of the four persons selected as donors one gave a strongly positive Wassermann reaction.

Mercury.—The formula issued by the Public Health Department, containing mercury and iron, was given a fair trial, but it proved of no value, and so often disturbed the gastric functions of the patients that its use was abandoned. Inunction of mercury in the form of blue ointment was tried in several cases but without favourable result.

Eusol.—As in England intravenous injections of eusol had been used with advantage to combat the toxæmia and counteract the acidosis present in cases of broncho-pneumonia in children, we thought well to try it here. To a few patients 60 c.cm. eusol was given intravenously. Faulty technique made it doubtful if the full dose was received in some cases, but in two cases, in which the dose was certain, a transient feeling of well-being and improvement followed. In a few hours, however, the symptoms were aggravated and the general result was not such as to encourage a continuance of this method of treatment.

In our endeavour to relieve the engorgement and œdema of the lung, the following therapeutic measures were tired:—

Counter-irritation.—Mustard plasters, poultices, antiphlogistine, dry-cupping were freely used and in some cases contributed to the comfort of the patient for a time, but they were of no distinct or permanent value.

Turpentine inhalations.—Strong inhalations of turpentine (30 c.cm. in 120 c.cm. boiling water) gave decided relief in many cases by facilitating the expectoration of the exudate.

Ammonium carbonate in 0.6 gramme doses every two hours resulted in some cases in the expectoration of mug-fuls of white frothy sputum and gave relief, but more often no benefit followed its use.

Potassium iodide did not help, and *vin. antimoniale* pushed until nausea ensued, conferred no benefit.

Belladonna, as the tincture, was given freely in mixture and atropine sulphate was administered hypodermically in doses of 0.6 mgr. every hour, until physiological symptoms appeared, but with no decided advantage.

Adrenalin, in doses of 0.3 to 0.6 c.cm. of the *liquor*, was given hypodermically in several cases with are idea of increasing the lumen of the bronchioles. In one chronic asthmatic patient great relief followed, but other cases were not benefited. It is open to question whether, in view of the already congested state of the lungs, this treatment was advisable, but no harm resulted.

Intra-muscular injections of saccharose.—With the object of diminishing the bronchial secretion, injections of a saturated solution of cane sugar, as recommended by Monaco, were administered to a few patients in doses of 2.5 c.cm. twice daily. The result in these cases was doubtful.

For the relief of cough.—At first we were so impressed by the respiratory difficulty of patients that we hesitated to use so powerful a respiratory depressant as heroin, and preferred codeine given as the

syr. codeinæ phosph. by the mouth in doses of 3.6 c.cm. repeated at short intervals, or as *codeinæ phosphas* hypodermically, in doses of 0.015 grm. every four hours. It usually gave relief. The supply of codeine running out, however, and our experience teaching us that rest must be secured, even at the risk of depressing the respiratory centre, we resorted to heroin, and found that doses of 0.005 grm. were usually sufficient, though some cases required 0.0075 grm.. Combinations of morphine and hydrobromic acid were also used with benefit.

To support the respiratory centre.—Strychnine was freely used in a majority of the cases. Doses up to 0.004 grm. every two hours were prescribed to patients in difficulty, but it is hard to say that the end in view was reached. As a preventive of respiratory depression *liq. strychninæ,* in doses of 0.3 c.cm. thrice daily, was given early to patients who were threatened with a severe attack, but whether with advantage is not clear. Strychnine was also used to counteract the depressant effects of morphine and other hypnotics.

To support the circulation.—Alcohol was used as a stimulant, chiefly in the form of brandy, in doses of 180 to 240 c.cm. in the twenty-four hours. Transient improvement often followed, but there was no enduring effect. It served best as an explosive stimulant. It was also used for its narcotic action and food value in delirious and in convalescent cases. The delirium was so violent that the mild narcotic effect of alcohol was of little avail, but in convalescent cases a beneficial action was evident. The patients experienced a feeling of well-being, ate more heartily, slept more soundly, and progressed more rapidly towards recovery under its influence. Alcohol had no apparent effect in combating the toxæmia of the disease.

Digitalis was administered, as the tincture in doses of 5.4 c.cm. daily, as the fresh infusion up to a dose of 14 c.cm. every two hours, and as Guy's pill. It seemed to have no effect.

Strophanthus, as the new pharmacopœial tincture, in doses up to 0.3 c.cm. every hour, did not make a favourable impression.

Strophanthin, 0.24 mgr. intravenously, was tried in several cases, but without evident benefit.

Caffeine, in doses of 0.3 grm. every four hours, was of doubtful value.

Pituitrin, 0.5 to 1 c.cm. of the 20% solution repeated two or three times daily, was used in several cases, but with no obvious advantage.

To combat delirium and promote sleep.—Of all the drugs used hypnotics afforded most satisfaction, and gave greatest and most enduring relief. We are satisfied that many lives were saved by the use of these drugs, which would have been lost inevitably without them. The following were used:—

Hyoscine hydrobromide alone, in doses ranging from 0.6 mgr. to 2.4 mgr., and hyoscine combined with morphine.

Chloral hydrate alone, in single doses up to 1.8 grm., or 0.6 grm. repeated every twenty minutes for four doses.

Chloral combined with morphine and with potassium bromide.

Veronal (given always in solution) alone, in doses of 0.3 to 0.6 grm., or combined with 0.0075, 0.01 or 0.015 grm. of morphine.

Trional (in solution), up to 1.5 grm..

Sulphonal (in solution), 1.8 grm..

Paraldehyde, 3.6 c.cm., repeated in fifteen minutes.

Morphine alone, up to 0.015 grm..

Of these hyoscine was the most generally useful and the least injurious. In one case 2.4 mgr. were used with advantage; in many cases 1.2 mgr. was given, but the most satisfactory dose was 0.8 mgr.. An excellent combination was hyoscine and morphine, the morphine being added in doses up to 0.015 grm.. One life was unquestionably saved by exhibiting hyoscine, 1.2 mgr., and morphine, 0.01 grm., in combination.

Chloral was most useful in selected cases, but it should not be used with impunity. In cases showing much pulmonary engorgement or œdema it had an injurious effect. It was used to greatest advantage in delirious cases in which the lung symptoms were not pronounced.

Veronal acted very favourably in certain cases, especially when combined with morphine; but it cannot always be relied upon. No injurious effect was seen.

Trional was most effective in several wildly delirious cases, the patient awaking in his right mind after a prolonged sleep, in one case extending to two days.

Paraldehyde was remarkably successful in several cases, but the difficulty of repeating the dose in mentally alienated patients was insurmountable.

Sulphonal was only used when the supply of trional became exhausted. It did not act so efficiently.

A NEW OPERATION FOR *PROCIDENTIA UTERI* IN THE OLD.

By **A. Norman McArthur, M.B., B.S., M.R.C.S., L.R.C.P.,**
Senior Gynæcological Surgeon to In-Patients, St. Vincent's Hospital, Melbourne.

For a very long while I have been very troubled to know how to treat effectively the very old women who suffer from complete prolapsis of the vagina and uterus. I refer to that class of case in which the vagina hangs down between the thighs, becoming thickened and often ulcerated, and the uterus showing endometritis, with or without hypertrophy of the cervix, the bladder and anterior wall of the rectum being brought down with it. At first the patient is able to get about with increasing discomfort, until at last the discomfort becomes so great that she prefers to move as little as possible, and only reaches anything like comfort in the semi-reclining position. She is too old, over 65 or 70, to stand a long operation, and only an extensive operation will be effective. All the attachments of the uterus and vagina have been destroyed and have atrophied, the pelvic fascia, as a sling to support the uterus, and the atrophic muscles of the perineum are so feeble that they give little

chance of perineal repair. There is only one chance a surgeon has, and that is to resort to instrumental support, by means of some such device as the Leith Napier cup and stem pessary. This instrument demands constant cleaning and supervision, and, moreover, if the patient acquires a bronchitic cough, the perineal bands that support the pessary will be burst from their moorings. Moreover, instrumental relief does not give a great amount of comfort to the poor old lady, and it certainly gives little satisfaction to the surgeon. In younger women, under 65, who have reached the menopause or are otherwise sterile, who are strong and still have a good many years to live, a very extensive operation is, to my mind, the most effective. This consists of an extensive anterior colporrhaphy and a very extensive posterior colpo-perineorrhaphy; the abdomen is then opened, the uterus pulled up, that portion of the uterus that comes out beyond the recti muscles is removed, the cervical canal obliterated and the stump of the uterus attached to the under surface of the recti muscles after the peritoneum is sewn round the edge of the stump. This, to my mind, is the ideal method from the point of view of results that can be done for a woman suffering with *procidentia uteri*, but it is naturally a long and extensive operation, and too much for an old woman to withstand.

There are various other methods adopted by various surgeons, and many of those methods I have been able to review, but, owing to the extraordinary amount of atrophy and damage to the natural supports of the uterus, none of the operations are so thoroughly effective as the one I mention. One operation has become particularly popular for the time being, but I consider it an absolutely unsurgical procedure. I dismiss it with the hope that it will die the death it deserves. I refer to the operation known as interposition of the uterus.

For the very old I have therefore devised a new method, and as I can find no record of it having been suggested previously I think I can claim it as being original. It has been suggested to me by seeing a coat sleeve sewn longitudinally down the centre, making it quite impossible to invert that particular sleeve. The procedure for operation is as follows:—

(1) Strip off an area of mucous membrane from anterior vaginal wall, about a finger breadth in width, from just behind the orifice of urethra to within 1.25 cm. to 1.85 cm. of the junction of the cervix and vagina.

(2) Strip off an area from the posterior wall of vagina, 1.8 cm. from cervix, and pass it over peritoneum, so that the perineal muscles will be denuded (see Fig. II.).

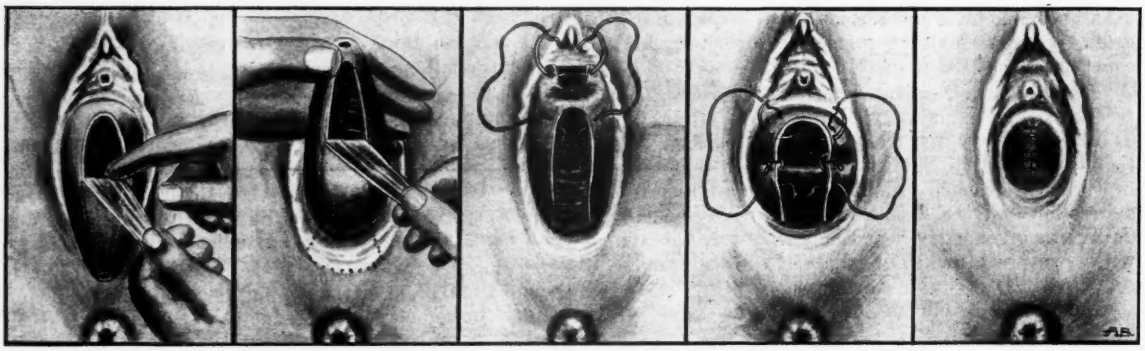


FIGURE I. FIGURE II. FIGURE III. FIGURE IV. FIGURE V.

(3) Then sew together with a continuous catgut suture the anterior cut edge and posterior cut edge on the left side (see Figs. III. and IV.).

(4) Do exactly the same on right side. Three or four insertions of the needle are made on the right side, and three or four on the left, and so on, alternating until the whole of the cut edges of the right side are united, as well as on the left side.

(5) One will find as one works on the prolapsed vagina that, as the stitches are pulled taut, the cervix recedes into the vaginal orifice until it is lost to touch.

(6) The next procedure is to complete the perineorrhaphy by inserting three or four sutures into the already denuded perineum, tying these up and completing the closure of the cut edges of the vaginal mucous membrane (see Fig. V.).

The whole process can be followed by referring to the illustrations in sequence: I., II., III., IV., V. The skin is united as in an ordinary perineal repair. The final result is seen in Figure V., where there are two lateral openings capable of admitting easily the first finger, but the finger is not able to reach the cervix.

I claim for this operation:—

(1) That there is no possibility of prolapse of the vagina.

(2) That it is much more rapid than complete excision of vagina.

(3) That it permits of leucorrheal discharge from the cervix, if any, passing down from the uterus.

(4) That it can be performed very rapidly, as in the old the mucous membrane peals off with extraordinary ease.

(5) That surgical shock is practically nil.

(6) That subsequent comfort is extraordinary, as I have seen patients only recently that I have done four years ago.

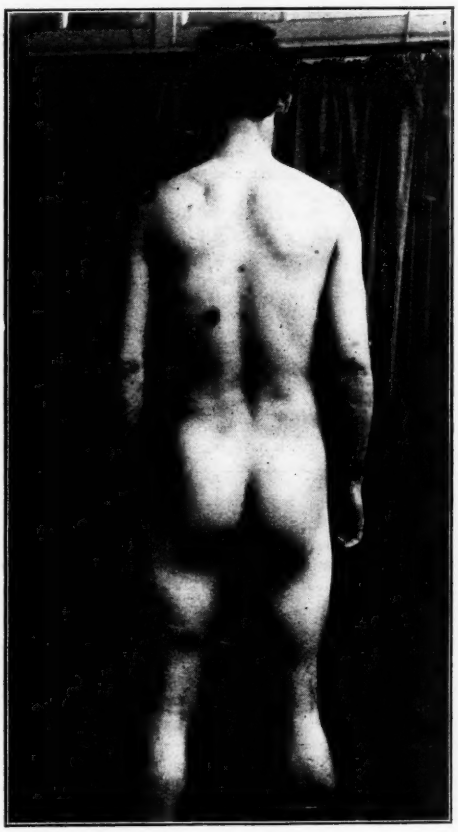
(7) That the remaining years of an old woman are made comfortable.

Reports of Cases.

DERMATITIS MEDICAMENTOSA DUE TO ANTIPYRINE, WITH PERSISTENT PIGMENTATION.

By **Norman Paul, M.B., Ch.M.,**
Honorary Dermatologist, Royal Alexandra Hospital for Children; Honorary Dermatologist, Royal North Shore Hospital; Honorary Assistant Dermatologist, Sydney Hospital.

Although cases of *dermatitis medicamentosa* following the ingestion of antipyrine have been reported, in some of which pigmentation has ensued, yet the present case, on account of its clinical characters and the somewhat permanent nature of the pigmentation, is worthy of record. The patient was a male, aged 32 years, a strong and healthy individual, who had reached some prominence in the athletic world. He had already consulted numerous medical men, and, uncertain of the diagnosis, they usually fell back upon the possibility of the eruption being syphilitic, an opinion which was causing him considerable uneasiness of mind when I first saw him.



His blood had been tested several times, and the Wassermann reaction had on each occasion proved to be negative.

History.

The patient stated that it was now four or five years since the eruption first appeared, but that he had been unable to suggest any causative factor, although the relationship of drugs to the cutaneous lesion was suggested by me. However, during the time that he was attending fresh lesions appeared and, again being questioned as to whether any medicine had been taken, he stated that he had taken some headache powders (antipyrine) the previous evening. This incident recalled to his mind the fact that the first eruption had also followed closely upon the taking of a headache powder and was associated with intense pruritus, so severe that the surface epidermis over the affected patches was excoriated by rubbing. The patient was then unable to tolerate his clothes, on account of the resultant tenderness and was compelled, in order to avoid dressing, to spend a couple of weeks at the seaside. The quantity of antipyrine taken was not ascertainable.

Clinical Examination.

The following description refers to the lesions as I saw them three years ago and the accompanying photograph reveals the eruption as seen at that time on the dorsal surfaces and photographed immediately after several fresh lesions had appeared. The lesions were all isolated and sharply defined plaques; the recent ones were erythematous, circular, well defined, slightly elevated and appeared mainly on the extensor surfaces of the arms in the vicinity of the elbows and on the buttocks. They were itchy, and were for the most part the size of a shilling or a sixpence. The older lesions, which had already been present for some considerable time before I saw the patient, were flat, definitely circular and varied in size, the majority being about the size of a florin or a half a crown. They were divided into two zones, an external, of a dark, purplish or violaceous colour, with a central whitish area, suggestive of and giving the appearance of fine atrophy. (The central whitish areas are not well portrayed in the photograph.) Other lesions, again, showed the outer zone to be of a slatish-brown colour, with a similar white centre; in appearance they were not unlike lesions sometimes seen in macular leprosy. On the anterior surface of the body there were only two lesions, one above the umbilicus, the other affecting the greater portion of the penis and showing a dark purple or blackish tinge, without any central whitish area, and of an irregular shape. If antipyrine powders were taken, within an hour these old lesions again became itchy. Examination of the cutaneous surface at the present time (December, 1918) shows that some of the original lesions have disappeared, while others remain as dirty, blackish areas of pigmentation, not so intense as the original plaques and evidently showing signs of disappearance.

Brocq and Darier have reported cases of persistent erythema, accompanied by pigmentation and produced by antipyrine. Fournier reported pigmentation of the penis following an erythematous eruption after taking antipyrine, and Ehrmann noted macular pigmented lesions on the penis and scrotum which recurred in the same place from time to time and usually followed the ingestion of antipyrine. In the present case I would suggest that the pigmentation was in a measure due to the severe rubbing and excoriation of the lesions, as others not so severely dealt with disappeared without leaving any signs of pigmentation.

Reviews.

PHYSIOLOGY.

The eighth edition of Stewart's Manual of Physiology is a book which can be highly recommended to the student and to the practitioner desirous of keeping in touch with the modern developments of physiology.[1]

There are no very marked changes over the previous edition, but the whole book has been brought thoroughly up to date, and few of the important advances of the past few years have been overlooked.

The advantages to be gained by the introduction of details of practical experiments into a general text book are not obvious, although the experiments are well chosen. The author, however, emphasizes the importance of practical work for a proper understanding of the subject, remarking that the laboratory is "the seed bed of the whole science."

A new feature of this edition is a good bibliography which should prove useful to those who wish to obtain further details about any particular subject.

The text is very readable and the subject matter well chosen.

[1] A Manual of Physiology, with Practical Exercises, by G. N. Stewart, M.A., D.Sc., M.D., D.P.H.; Eighth Edition; 1918. London: Baillière, Tindall & Cox; Demy 8vo., pp. 1,245, with one coloured plate and 492 other illustrations. Price, 21s. net.

The section on endocrine glands is fuller than one usually finds in text books of physiology, and the different views as to the functions and inter-relationships of the different organs of internal secretion are presented in an admirable manner.

Metabolism is treated very fully, but in the section on dietetics too little stress is laid on the importance of the recent discoveries in relation to food accessory substances.

It is difficult to see why the physiology of the contractile tissues should be treated so late as the XIIIth chapter, while the mechanism of the heart beat is dealt with in chapter III. There is a very interesting discussion as to the nature and origin of the heart beat in which the author presents and compares the different views which have been advanced to explain the automatism of the heart beat. While giving a perfectly fair account of the different views the author seems to be greatly impressed by Carlson's discovery that in the crab *Limulus* the rhythmical beat is sustained by nervous impulses.

The autonomic nervous system is treated very briefly in comparison with other sections, much too briefly, considering its importance.

An excellent account is given of the physiology of the special senses, more than fifty pages being allotted to vision.

A useful feature of the book is the summaries in italics of important arguments.

The whole subject is treated judicially, and the book is one of the best of its kind in the English language.

The Editors of *Our Alma Mater*, the annual magazine of St. Ignatius' College, Riverview, Sydney, have again favoured us with a complimentary copy of their excellent publication. The greater part of this year's issue is devoted to a record of the deeds of past and present boys in the war. The College has a just claim for recognition, inasmuch as no less than 301 of its pupils have served their country, and 55 have given their lives. There is a great charm in the descriptive paragraphs of these war records. Tales of dauntless bravery, of unflinching recognition of duty and of the greatness of self-sacrifice emerge from many pages of these records and appreciations. And yet there is a human element which infuses a reality into each one. The College enjoys a high reputation for its fine system of education, and for a splendid tone among its scholars. This reputation has been enhanced by the magnificient record of these three hundred and one brave boys. There is an excellent series of photographs of them, reproduced in first-class style, and this lends added interest to the descriptive matter. In addition to the war part of the magazine there are chapters dealing with the educative part of school life and with the lighter side. The debating club forms a sort of connecting link between the two. Throughout the pictorial and literary matter we find evidence of the high tone which exists in the school. Australia, developing on these lines, has an assured future of greatness. Those responsible for the magazine are to be warmly congratulated on a high grade of efficiency in their work.

Public Health.

NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the three weeks ending February 8, 1919:—

	Metropolitan Combined District. Cs.	Dths.	Hunter River Combined District. Cs.	Dths.	Rest of State. Cs.	Dths.	Total. Cs.	Dths.
Enteric Fever	47	0	3	0	32	0	82	0
Scarlatina	28	0	0	0	35	0	63	0
Diphtheria	90	0	16	0	87	0	193	0
*Pul. Tuberculosis	52	15	1	0	1	0	54	15
C'bro-Sp'l Menin.	1	2	1	0	1	0	3	2
Poliomyelitis	2	0	1	0	0	0	2	0
P'monic Influenza	23	—	1	—	6	—	30	—

* Notifiable only in the Metropolitan and Hunter River Districts, and, since October 2, 1916, in the Blue Mountain Shire and Katoomba Municipality.

VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, during the week ending February 2, 1919:—

	Metropolitan. Cs.	Dths.	Rest of State. Cs.	Dths.	Total Cs.	Dths.
Enteric Fever	6	0	1	0	7	0
Scarlatina	23	0	17	0	40	0
Diphtheria	37	4	45	1	82	5
Pulmonary Tuberculosis	10	8	6	1	16	9
C'bro-Spinal Meningitis	0	0	1	0	1	0
Puerperal Fever	2	0	0	0	2	0

QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ending February 1, 1919:—

Diseases.	No. of Cases.
Enteric Fever	17
Scarlatina	6
Diphtheria	17
Pulmonary Tuberculosis	9
Cerebro-Spinal Meningitis	1
Poliomyelitis	2
Erysipelas	5
Anchylostomiasis	1
Puerperal Fever	1

SOUTH AUSTRALIA.

The following notifications have been received by the Central Board of Health, Adelaide, during the fortnight ending January 18, 1919:—

	Adelaide. Cs.	Dths.	Rest of State. Cs.	Dths.	Total. Cs.	Dths.
Enteric Fever	0	0	10	0	10	0
Scarlatina	1	0	37	0	38	0
Diphtheria	4	3	48	4	52	7
Pulmonary Tuberculosis	4	10	30	12	34	22
Erysipelas	2	0	1	0	3	0
Morbilli	2	0	79	0	81	0
Pertussis	7	0	30	1	37	1
Puerperal Fever	0	1	1	0	1	1
Malaria	0	1	0	0	0	1

TASMANIA.

The following notifications have been received by the Department of Public Health, Tasmania, during the fortnight ending January 25, 1919:—

Diseases.	Hobart. Cases.	Launceston. Cases.	Country. Cases.	Whole State. Cases.
Enteric Fever	1	1	0	2
Scarlatina	2	0	0	2
Diphtheria	1	3	18	22
Pulmonary Tuberculosis	2	0	5	7
Ophthalmia Neonatorum	0	0	1	1

WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia, during the fortnight ending January 18, 1919:—

	Metropolitan. Cases.	Rest of State. Cases.	Totals. Cases.
Enteric Fever	9	6	15
Scarlatina	19	15	34
Diphtheria	23	21	44
Pulmonary Tuberculosis	10	3	13
Cerebro-Spinal Meningitis	1	0	1
Erysipelas	5	2	7
Malaria	1	0	1
Beri-Beri	0	4	4
Bilharziosis	0	1	1

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A Medical Tribunal.

Dr. J. L. Jona makes the interesting proposal in a letter appearing on another page that a tribunal should be up to control the manner in which medical practitioners discharge their responsibilities to the public. He suggests that this tribunal should be composed exclusively of medical practitioners, and that it should investigate the cause of every death. There appears to us to be many practical difficulties which must militate against the adoption of this proposal, but this does not indicate that some means cannot be devised to cope with the evil to which he calls attention. The medical profession in Great Britain and Ireland is fortunate in having a statutory body, the General Medical Council, which has been vested with powers to regulate the ethical conduct of medical practitioners. It has frequently been stated that the rules governing professional conduct have been formulated by the British Medical Association. This statement is absolutely untrue. In the mother country the General Medical Council is the only body endowed with powers to dictate to medical practitioners in regard to professional conduct. The Council has the power to remove the name of a practitioner for certain well-defined offences, which have been summarized as "infamous conduct in a professional respect." The law demands that a medical practitioner shall exercise a reasonable degree of knowledge, care and skill in dealing with his patient. In actual practice it is very rare for a medical practitioner to be held responsible for a mistake in diagnosis or want of skill in treatment.

In Australia the medical boards have restricted powers, somewhat analogous to those of the General Medical Council. It is, however, eminently desirable that a better control should be kept over the profession. The Federal Committee of the Branches of the British Medical Association in Australia have for some years had under consideration the advisability of urging the introduction of either a Federal medical act with one Australian medical council, similar in constitution to the General Medical Council, or six uniform medical acts in the several States. It has been decided that a Federal act, however desirable, could not be obtained without an alteration of the Constitution. This proposal has, therefore, been abandoned for the present in favour of uniformity. Unfortunately, recent events in Tasmania and elsewhere have indicated that, however impracticable the proposal of a Federal act at the present juncture may be, the alternative does not appear to be more promising. Since it is our duty as a profession to aim at ideals and to urge reforms which would render the medical profession of greater use to the public, we should not be deterred from demanding new measures merely because they appear at the moment to be difficult of accomplishment. It is not impossible that the decision of the Federal Committee may be revised in the future and that the proposal of a medical tribunal with wide powers may be included in the discussion. If this subject be taken seriously, it would be necessary to consider how a tribunal could be constituted so that it might compel medical practitioners to exercise knowledge and skill in their practice, to submit to ethical rules drawn up for the protection of upright members of the profession and in the interests of the community and to recognize a statutory authority in connexion with the conduct of their practice. This tribunal would not clash with the councils and committees of the British Medical Association in Australia, since this Association has never attempted to exercise more control over its members than is exercised by any other society or club.

THE CLASSIFICATION OF TRYPANOSOMES.

The study of protozoology has resulted in an entirely fresh conception of many diseases. Protozoologists have taught bacteriologists a wholesome lesson by insisting on the adoption of scientific methods in investigating the life-history and physiology of micro-organisms and in requiring something more than a mere morphological differentiation between the various members of a species. It is not too much to hope that within a few years bio-chemical research will result in the determination of physiological processes characteristic of a particular protist, protozoon or bacterium, which will be available for the purpose

of differentiation in addition to morphological and biological attributes. It has long appeared to us that the necessity of seeking for artificial attributes, such as the power of a bacterium to ferment different forms of sugar, is attended by risks of error, since bacteria rarely, if ever, are brought in contact under natural conditions with the majority of the sugars employed in these tests. The protozoologist has hitherto resisted this method of attack, and has based his classification on physiological, biological and morphological characters alone.

Dr. Albert J. Chalmers, the Director of the Wellcome Tropical Research Laboratories at Khartoum, has performed a signal service to science in endeavouring to introduce a new classification for the trypanosomes, based on ascertained formative and physiological peculiarities of the several organisms. The new classification may or may not be accepted in its entirety, and the new terms introduced may be refused by some protozoologists. Dr. Chalmers recognizes that it may be held that it is premature to attempt a classification while so many members of the three tribes have yet to be studied. He will undoubtedly receive much support from those who look ahead and anticipate confusion, instead of allowing it to become established. His primary argument is that originally the genus *Trypanosoma* was limited to a trypaniform parasite of relatively large size and slow movement, generally found in the blood of cold-blooded vertebrates and spread by leeches. There is, in addition to this genus, another, less well-defined genus. Some of these trypanosomes complete their life cycle within an invertebrate host. As evolution has progressed the life-histories have become more complicated in many instances, and the introduction of a vertebrate intermediate host has apparently resulted in a smaller, quick-moving trypanosome. He therefore proposes the recognition of a trypanosome which lives only in a definitive invertebrate host. To this he gives the name *Cystotrypaneæ*. The type genus of this series is the *Cystotrypanosoma* Rouband, 1911, and the type species *C. intestinale* Rouband, 1911. The differentiation of this series depends for the present on the host and on the morphological characters of the organism. The second series include those trypanosomes which live in a definitive invertebrate host and in a cold-blooded intermediate vertebrate host. He calls them *Trypanosomeæ*. The type genus is *Trypanosoma* Gruby, 1843, and the type species *T. rotatorium* (Mayer, 1843). He suggests that this group may be further split up into fresh genera. Little is known of the individual members. The third series contains trypanosomes that live in a definitive invertebrate host and in a warm-blooded intermediate vertebrate host. He proposes for them the new term *Trypocastellanelleæ*. They would include trypanosomes of aves and trypanosomes of mammalia. Of the latter, some are held to be non-pathogenic, and of these many are still unclassifiable. Among the pathogenic forms he distinguishes the genus *Schizotrypanum*, the genus *Castellanella* and the genus *Duttonella*. Lastly, he wishes to add an unclassifiable group tentatively, which he calls, presumably for want of a better term at present, *Trypanosoma sensû lato*. It is unnecessary for us to reproduce the details of the classification further, since the arrangement must first be studied and tested with care before the minuter details are examined critically. The general scheme is rational and scientific, and whether it is accepted in its present form or modified in one or other direction, it represents an important step toward the removal of many uncertainties and difficulties.

THE ÆTIOLOGY OF RICKETS.

Rickets has probably existed ever since man emancipated himself from his natural condition and became a slave to those conventions which pass for civilization. It has been recognized as a disease entity for over eighteen centuries, but, nevertheless, its true causation remains as hidden to-day as it was when Soranus Ephesius published the first account of its changes. Some years ago Professor Leonard Findlay endeavoured to show that rickets was closely associated with a want of fresh air, with a defective parental care and with faulty sanitary surroundings. His studies in Glasgow were not complete enough to command widespread acceptance of his opinions, and consequently he sought corroboration of the data on which he had founded his conclusions. Miss Margaret Ferguson, working under the direction of Professors Findlay and Noël Paton, undertook an investigation into the social environment of the Glasgow industrial population, with a view to a comparison being drawn between families including one or more rachitic members and families of healthy individuals. She has now published the results of her studies.[1] Profesor Findlay appends a historical survey to this account. It is un-

[1] A Study of Social and Economic Factors in the Causation of Rickets, by Margaret Ferguson, M.A., with an Introductory Historical Survey by Leonard Findlay; Medical Research Committee, National Health Insurance; Special Report Series, No. 20; 1918.

necessary to recapitulate in this place the account of the early records of rickets, although we can recommend its perusal, as it is well presented and highly interesting. In regard to the ætiology of the disease, Professor Findlay disposes of the several theories *seriatim*. In the first place, Siegert endeavoured to persuade the world that the disease is inherited. The evidence shows that the disease is so common that its occurrence in the parents of many patients would occur whatever its cause might be. Professor Findlay's and Miss Ferguson's observations demonstrate that heredity does not play an ætiological rôle. Siegert also found that rickets was more common among infants artificially fed than among those breast fed for at least 4½ months. It has, however, been shown that rickets is exceedingly common among infants whose diet is derived exclusively from the mother's breast. Miss Ferguson found that among the Glasgow community rickets was not markedly more common among artificially fed infants and she arrived at the conclusion that artificial feeding is of small significance in the production of the disease. The suggestion that rickets is due to a poverty of calcium salts in the milk is disposed of by the demonstration of the difference between the changes induced by a deliberate reduction of the calcium content of the diet and the changes characteristic of rickets. Prolonged suckling has been incriminated, but the fact that Japanese women frequently suckle their infants for two or three years and yet the disease is rare in Japan. Some observers claim that errors in artificial feeding induce the rachitic changes in bone. A deficiency of fat, a deficiency of protein and an excess of carbohydrate have each been put forward as a cause. Freund has demonstrated that an excess of milk fat leads to an increased excretion of calcium. It has been proved that rickets may arise in a child fed on an excess of fat. Moreover, it is frequently observed that rachitic children have an excessive deposit of body fat, which would be unlikely if this substance were lacking from the diet. Miss Ferguson has found that the majority of Glasgow children receive a sufficiency of fat, irrespective of the development of rickets.

Ashby suggested in 1901 that in the fermentation of carbohydrates there were formed toxins capable of producing the disease. Heitzmann held that lactic acid was the toxin produced and claimed to have produced rachitic changes experimentally by giving lactic acid. Other investigators have failed to confirm this result. Esser suggested that chronic over-feeding led to a chronic gastro-enteritis, with impairment of the power of absorption of the food constituents. Eric Pritchard recently revived the theory of over-feeding and combined this theory with that of Ashby and Heitzmann. He argued that over-feeding acted by the induction of excessive absorption and consequent deficient utilization and oxidation. The partial metabolism, he held, led to the formation of increased tissue acid and the acidosis produced a decalcification. This author explained that the changes in the bones represent an attempt on the part of the body to produce fresh oxygen carriers to compensate for the hæmolysis which he maintained is a constant result of acidosis. Findlay calls attention to the fact that in rickets the changes are limited to the bones and the decalcification does not affect the other tissues. In other forms of acidosis this differentiation is not present.

Among the theories based on defects in the hygienic conditions of the home, the views put forward by von Hansemann claim the first place. This biologist noted that animals kept in artificial surroundings in zoological gardens frequently develope rickets, even in countries like Japan, where rickets is rare. He ascribed the disease to domestication. Findlay is prepared to accept von Hansemann's views, provided that the suggested confinement is regarded as involving deficient exercise. He has reared puppies on a normal diet and has succeeded in reproducing the bone changes of rickets in those which were deprived of exercise. He has no evidence of any limitation of the utilization of food or of the production of excessive waste products. Miss Ferguson adduces a mass of evidence to show that parentage exercised no influence in the production of the disease, but that the health of the mother may play a contributory part. Careless mothers in Glasgow have more rachitic children than careful mothers. Rickets developes more frequently in the winter and spring than in other seasons. She has found on a minute study of the economic conditions of Glasgow families and by comparing these conditions with those obtaining in the garden cities of Bourneville and Port Sunlight, where rickets is very rare, that the factors occurring regularly in association with rickets are inadequate exercise of the children and a want of fresh air. The disease was found when the social conditions were bad or indifferent. Thus, in homes in which the income was below 30s. per week rickets was very common, while it was increasingly infrequent as the income exceeded this amount. Neither Professor Findlay nor Miss Ferguson, however, offer any suggestions as to how this want of fresh air and deficient exercise lead to the bone changes. In some of the observations the evidence appears to be doubtful. The data concerning the length of time the children spent in the open air appear to have been based on the statements of the mothers and are consequently to be accepted with some reserve. Many of the facts, however, are of importance and interest.

A further group of theories is dealt with, in which the alleged causation is an infection. None of these theories can be substantiated. On the other hand, the intoxication theories are not so easily disposed of. Lastly Professor Findlay mentions the theories of a disturbance of the internal secretions. He finds that there is as yet no experimental or other evidence in support of the assumption that an internal secretion is essential for the development and calcification of bone.

From the observations of Professor Findlay and Miss Ferguson is does not appear as if the problem of the ætiology of rickets has been solved. We learn from an introduction to the report that Dr. Edward Mellanby is about to publish his researches on the production of experimental rickets by the withholding of an accessory factor in the food of a nature somewhat similar to the vitamines associated with scurvy and beri-beri. This announcement would seem to indi-

cate that the members of the Medical Research Committee attach some importance to these experiments. It is possible that we may yet have the true explanation of this mysterious pathological process.

EXPERIMENTAL PAROTITIS.

It is widely held that parotitis is caused by a bacterium or protozoon of such small dimensions that it can pass through the interstices of a porcelain filter. Unfortunately, the direct test cannot be applied in this case, since hitherto no one has succeeded in cultivating the virus artificially. At the last International Congress of Medicine, held in London in 1913, a very valuable discussion took place on the so-called "filter passers," and from this discussion emanated the recognition that the establishment of a case for any given filter passer was a very difficult thing. Many have gone by the board, while a "position in the sun" of several others was regarded as hazardous. Nevertheless, it must be admitted that when an infection can be definitely reproduced by the injection of the filtrate of infective material, after it has been passed through a Chamberland filter of considerable density, the virus is a filter passer. In order to prove that the virus is actually capable of passing through the filter, certain tests must be performed. The filtration must be conducted with reasonable celerity, to exclude the possibility of a growth through the filter. The filter itself must be tested with a suspension of living cocci of small size. A defective filter that will permit of the passage of a coccus and the subsequent cultivation of the same coccus in the filtrate must, of course, be discarded. Similarly, the filtrate must be proved by culture and microscopically to be free from visible organisms. It has occurred that a pure filtrate has been erroneously attributed with power to reproduce an infection, when in reality the infective agent was introduced by accidental contamination of the filtrate between the time of collection and that of injection. In this connexion it must be borne in mind that the ingenious theory of E. C. Hort has not yet been disproved. He claimed that certain bacteria that can be recognized morphologically and culturally, represent but a stage in a larger life cycle of a more complicated organism, and that one phase in some of the organisms was represented by an individual so small that it could pass through the closest filter. Further evidence is required before this theory may be refused or accepted. If it be true, it would be of paramount importance to ascertain whether such an organism is capable of infecting in all its phrases or only in one.

Martha Wollstein has recently had an opportunity of extending her researches of 1916 in connexion with the filter passer of parotitis.[1] The outbreak of mumps among soldiers in the military camps in New York was utilized to ascertain whether the virus could be obtained from the parotid secretion of the adult patients in the different stages of the infection, whether it was contained in the blood, and whether it could be passed on from cat to cat. She did not use a Chamberland filter, but trusted a Berkefeld candle N, controlling the filtrate by culturing it aerobically and anaerobically. The saliva of soldiers suffering from mumps in the first to the twelfth day of disease was collected in normal saline solution and filtered. The filtrate was then injected into the parotid gland and testes of half-grown cats. It was found that the filtrate of the mouth washings obtained during the first three days of illness produced a pyrexial attack in the cats, characterized by leucocytosis, tenderness and swelling of the parotid glands and typical histological changes. The symptoms appeared after an incubation period of from five to eight days, and lasted about eight days. The results were less marked when the saliva of soldiers in the sixth day of the attack was used. The effect of the filtrate of saliva taken on the ninth, eleventh and twelfth days of illness was extremely slight. The saliva of the artificially infected cats after filtration proved capable of giving rise to the same condition in fresh cats. Similar experiments demonstrated that the blood contained the virus while the patients were suffering from constitutional symptoms. The cerebro-spinal fluid was shown to be non-infective.

[1] *The Journal of Experimental Medicine*, October 1, 1918.

PNEUMONIC INFLUENZA.

Since we went to press last week there have appeared in the *New South Wales Government Gazette* five proclamations and one set of regulations, all dealing with influenza. The first, dated February 7, 1919, is to the effect that no person or persons may hold a meeting within the County of Cumberland for a religious or any other purpose in any house, hall, other building, park, recreation ground, street or other public place, or in any field or upon any land, although privately owned. On the same day His Excellency the Governor, by proclamation, extended all the orders applying to the County of Cumberland made in connexion with "the outbreak in New South Wales of the infectious disease known as pneumonic influenza" to apply to the Municipal District of Albury. On February 11, 1919, His Excellency the Governor of New South Wales ordered all racecourses in the State to be closed, but on the following day he varied this order by permitting racecourses in the Broken Hill and South Broken Hill districts to be opened and to remain open. The last proclamation, which was issued on February 12, 1919, deals with "a large number of persons who were on board the said ship" (*Argyllshire*) and who "are now in camp upon the land known as the Sydney Cricket Ground." The proclamation orders that none of these persons may leave the Cricket Ground and that no person other than a person duly authorized by the Director-General of Public Health may go upon the Cricket Ground or within a hundred yards of it "while the said persons who were on board the said s.s. *Argyllshire* are there."

The following regulations, issued under the provisions of the *Public Health Act, 1902* (New South Wales), and the *Quarantine Act, 1897* (New South Wales), have been issued from the office of the Minister of Public Health:—

1. Whenever by any order made by the Governor, with the advice of the Executive Council, the doing of anything is enjoined or forbidden, or has been enjoined or forbidden, for the purpose of cutting off communication between persons who are or may be infected with an infectious or contagious disease that has appeared or broken out in New South Wales and the rest of His Majesty's subjects, any person, or persons, corporation, or corporations shall commit a breach of such order he shall be liable to a penalty not exceeding £20.

2. The word "contact" whenever appearing in these regulations shall mean a person who has been residing in the same house with any person suffering from pneumonic influenza, or who has otherwise been in close personal association with a person so suffering during his illness.

3. All legally qualified medical practitioners or officers of the Board of Health may direct any contact to present himself for medical examination at such places and times

as such medical practitioner or officer shall then indicate, during a period of four days after such contact shall have ceased to reside in the same house as the person suffering from pneumonic influenza, or to be in close personal association with any person so suffering.

4. Any such medical practitioner or officer as aforesaid may, in lieu of or in addition to any such direction as provided in the last preceding regulation, direct any contact to remain in his own dwelling or place of residence and abstain from leaving the same and from coming in close personal association with any person who is free from the said disease.

5. All contacts may be removed by an officer of the Board of Health to a place set apart by the Board for the control of contacts and there detained until discharged by the Board.

6. If any person shall enter a place set apart for the control of contacts he may be detained in such place until discharged by the Board of Health.

7. Any legally qualified medical practitioner or officer of the Board of Health may call to his assistance in carrying out these regulations any police constable or other peace officer, and if any person shall obstruct or hinder or assault or interfere with any medical practitioner or officer of the Board of Health or police constable or other peace officer called to their assistance in the execution of their duty under these regulations, he shall be liable to a penalty not exceeding £20.

8. If any person shall fail to comply with any direction given by any legally qualified medical practitioner or officer of the Board of Health, or shall break out or leave any place set apart for the control of contacts until discharged therefrom by the Board of Health, or shall commit any other breach of these regulations, he shall be liable to a penalty not exceeding £20.

Additional regulations under the *Health Act, 1915*, Victoria, were issued by the Minister of Health on February 7, 1918. The first regulation defines the regulations as the "influenza regulation (closing of places of entertainment), 1919 (No. 2)," and determines that they shall come into operation forthwith.

2. "Infected area" in these regulations means an area as so defined in the "Influenza Emergency Regulations, 1919."

Persons shall for the purpose of these regulations be deemed to assemble in excessive numbers when more than ten persons congregate in a manner so as to leave less than 25 superficial feet available for each individual present.

"Occupier" means any person or persons or any incorporated body having the right to control or regulate the admission of persons to any place or ground.

3. All meetings within the State of Victoria for the purpose of holding any horse, pony or trotting race or races are hereby prohibited, and all racecourses or places used for the purpose of horse, pony or trotting races within the State shall be closed and not used for such purposes until notice permitting such use is published in the *Government Gazette*.

4. Persons are forbidden to assemble on a racecourse for the purpose of attending any horse, pony or trotting race or races until the prohibition is withdrawn by notice in the *Government Gazette*.

5. Every billiard-room or saloon within an infected area in respect of which a billiard-table licence is held or within any licensed victualler's premises shall be closed and not used until notice permitting such use is published in the *Government Gazette*, and persons are hereby forbidden in an infected area to resort to any such billiard-room or saloon.

6. In an infected area persons are forbidden to assemble in any open places (whether wholly or partially) in excessive numbers for any purpose whatever.

7. In an infected area every occupier of any place or ground (including a swimming bath) used for the purpose of playing or indulging in any outdoor game or exercise to which persons other than the players or persons exercising are admitted, either on payment or otherwise, shall with respect to the disposition, management and control of the persons resorting to the place or ground ostensibly for the purpose of watching the exercise there indulged in or the game there being played, or intended so to be, shall observe or cause to be observed the following regulations:—

(*a*) That not more persons are admitted to the place or ground than the open space thereof properly available for the accommodation of spectators (excluding buildings) is sufficient to prevent an assemblage in "excessive numbers."

(*b*) Prevent any roofed stand or other such convenience availed of for a like purpose on the place or ground to be used or resorted to by persons admitted on the premises.

(*c*) Prevent any unroofed stand or other such convenience as aforesaid to be occupied by persons in excessive numbers.

8. No person suffering from influenza and no person who has knowingly come in contact within three days from such contact with a person so suffering and no person while deemed to be a convalescent from such disease (and every person who has been ill with the disease shall be deemed such until the expiration of seven days after his temperature becomes normal) shall proceed from an infected area to a place beyond or pass through an uninfected area within Victoria, and no such person shall cross from either of the adjacent States into any part of Victoria.

The Bureau of the Census in a report dealing with deaths from influenza and from pneumonia in the various cities of the United States of America up to October 12, 1918, records that in Boston, a city with a population between that of Sydney and that of Melbourne, there were in the course of three weeks 2,441 deaths from influenza and 577 from pneumonia, making a total of 3,018. In Philadelphia, a city with a population midway between that of New South Wales and Victoria, there were in the course of two weeks 2,096 deaths from influenza and 1,245 from pneumonia, making 3,341 in all. These figures indicate that in Boston 3.9 per 1,000 of population died of influenza and pneumonia in three weeks, which yields an average of 1.3 per week; and in Philadelphia 1.9 per 1,000 died from the same diseases within a fortnight, or 0.95 per week.

University Intelligence.

THE UNIVERSITY OF SYDNEY.

A meeting of the Senate of the University of Sydney was held on February 3, 1919, at University Chambers, Phillip Street, Sydney.

The following degrees were conferred in person: B.A., W. Harlow Matheson; B.D.S., Cyril Herbert Burton and Bruce McEwen.

The following appointments were made for a period of one year: (1) Tutor in Anæsthetics, Dr. M. C. Lidwill; (2) Demonstrator in Electrical Engineering, Mr. L. Hey Sharp, B.E.; (3) Demonstrator in Organic Chemistry, Miss Alberta C. P. Andrews, B.Sc.; (4) Matriculation Examination in History, Dr. P. R. Cole.

An alteration has been made in regard to the site and extent of the Quarantine Area at Lytton, Queensland. The former area, defined by proclamation in 1916, has now been modified in a proclamation dated February 10, 1919.

We have been requested by the Organization and Science Committee of the New South Wales Branch of the British Medical Association to publish the following notice:—

> New South Wales Branch members and other members of the profession, upon their return from active service, who wish for information in regard to Association matters, are invited to communicate with or see the Honorary Secretary of the Branch, at the B.M.A. Building, 30-34 Elizabeth Street, Sydney.

At a meeting of the Healesville Water Trust (Victoria) held recently, Dr. R. A. Parker (B.M.A.) was elected Chairman of the Trust.

Abstracts from Current Medical Literature.

MEDICINE.

(65) Traumatic Tuberculous Effusion.

H. A. Bray records a case illustrating the re-awakening by trauma of a previously benign tuberculous pleurisy in an apparently healthy person (*Journ. Amer. Med. Assoc.*, November 23, 1918). In apparently healthy persons, the development of a tuberculous effusion following trauma of the thorax is usually explained in the following way. A latent or healed tuberculous focus of the pleura, prior to the injury, is assumed, except in those instances in which the bacilli gain access to the tissues through an abrasion or wound at the time of injury. Latent foci of the pleura are frequently found in persons dying of causes other than tuberculosis. These foci may and often do harbour living virulent tubercle bacilli. It is supposed that trauma causes a rupture of the fibrous capsule about the focus, and that living tubercle bacilli and their products escape through the tear into the pleural sac. The extent of the effusion and the rapidity with which it developes depend on the number, virulence and distribution of the bacilli over the pleural surface and on the allergic state of this tissue. In the recorded cases reviewed by the writer the tuberculous focus was not detected prior to the injury, but its presence assumed after detection of the effusion. Further, the time interval between the trauma and the recognition of the effusion, in most instances, was sufficiently long to admit of the possibility of other causative factors. In the case described by the author, a latent focus was recognized years previous to the injury and its re-awakening by trauma established. At the time of the injury the patient was stooping forward, the left hand raised, grasping a limb, and the other lifting a child from the water. The effort, no doubt, resulted in the tearing of pleural adhesions. Tubercle bacilli were discovered in the effusion, no doubt liberated by the tearing of the adhesions. This was followed by acute inflammation and rapid accumulation of fluid. The case confirms observations as to the possible recovery of the pleura in guinea-pigs from marked tuberculous involvement. As tuberculous effusion following trauma is not uncommon, the detection of benign lesions of the pleura should receive careful consideration before men are accepted for active military service, because of their frequent exposure to injury and the possibility of reactivating lesions of this nature.

(66) Influenza at Camp Sherman.

A. Friedlander, C. P. McCord, F. J. Sladen and G. W. Wheeler give an account of the epidemic of influenza at Camp Sherman, Ohio, U.S.A. (*Journ. Amer. Med. Association*, November 16, 1918). They mention that many cases of coryza and bronchitis appeared in Camp Sherman when the prevailing epidemic of influenza was at its height in New England. The symptoms were not those of influenza, but so many patients were ill that isolation was instituted. Much comment on the nature of the frequent illnesses was brought to an abrupt conclusion by the sudden appearance of large numbers of patients with the characteristic symptoms of influenza. The new type of illness showed sudden onset, prostration, aches and pains and high temperature. At the time of the outbreak the camp contained 33,044 persons, of whom 15,493 had been in camp for one month or less. During the epidemic, which lasted eighteen days, 7,618 men were admitted to the Base Hospital and 3,361 persons had an illness not necessitating treatment in bed. On the 7,618 patients, 2,001 suffered from pneumonia or acute pulmonary œdema, and 842 died. Two-thirds of the patients had been less than thirty days in camp. Throughout the epidemic examinations were made to establish the identity of the responsible germs. From smears and cultures of sputum the pneumococcus was the predominating organisms. Of the pneumococci 80% belonged to Type IV. and 18% to Type III. The bacillus of Pfeiffer was found twice. Cultures from swabbings of the throat exhibited the pneumococcus in 54% and hæmolytic streptococci in 4% of all patients examined. The *Bacillus influenzæ* was not once found. On the detection of a pneumonic complication cultures were again made from the sputum. Regularly the pneumococcus was demonstrated with 80% characteristic of Type IV.. Although the cultural conditions were suitable for the growth of the influenza bacillus, it was not detected in a single instance. Blood cultures were made from 100 patients and in six persons the pneumococcus Type IV. was obtained. The remaining cultures were sterile. Cultures obtained at necropsy showed the pneumococcus as the predominating organism in 53% of the bodies examined and the *Streptococcus hæmolyticus* in 47% of the cadavers. The authors emphasize the fact that they discovered the Pfeiffer organism in only two individuals. Clinically two forms of serious illness were recognized. In one type respiratory distress was noted with few physical signs in the lungs. In the second type which was characteristic of the epidemic, the patients exhibited on admission intense cyanosis. This was not the dusky pallid blueness of failing pneumonia but the deep blueness of methæmoglobinæmia. These patients had high fever, intense air hunger, complete exhaustion and prostration. The course was rapid to death in 24 or 48 hours. The lungs contained diffuse bubbling râles. The picture resembled acutely progressive pulmonary œdema. The authors give some account of the complications and of the pathological changes observed at autopsy. All the deaths were found attributable to acute pulmonary œdema or to pneumonia. In connexion with therapy, the importance of protection from undue exposure is emphasized, since there were many instances of broncho-pneumonia developing on the third day of convalescence. No treatment was of any avail for the acute pulmonary œdema. Digitalis, caffeine, morphine, pituitary solution, oxygen, venesection and posture were of no avail. The authors lay stress on the use of quinine solutions as an antiseptic mouth wash in preventing infection.

(67) Heart Lesions in Anæsthesia.

F. L. Richardson discusses the question of heart lesions in anæsthesia and quotes Snow's opinion that if a patient is able to undergo an operation he will not be an impossible subject for an anæsthetic (*Medical Press*, December 11, 1918). The author states that valvular heart lesions that are perfectly compensated and with a reasonable margin of safety, offer very little danger from anæsthesia. When, however, compensation is broken, or the margin of safety is very narrow, the danger of the anæsthesia increases markedly. If the heart lesion does not interfere with the ordinary affairs of life, it will not interfere with the taking of an anæsthetic. Lesions of the aortic valve are more serious than of the mitral, and stenosis more serious than simple regurgitation. Endocarditis and degeneration of the myocardium offer much more serious risks than chronic valvular disease, and angina pectoris is greatly to be feared. All treatment should centre about one fundamental principle, the maintenance of the blood pressure at a point as near the level which is normal for that individual as possible. Patients should be put in bed and watched for a number of days without any change in their medication or food. The patient should be in about the position he will have to occupy after the operation. The blood pressure should be measured at least once a day, the diastolic pressure being particularly important. In this period the physician has an opportunity of observing the effect of the post-operative position on the condition of the lungs. The character of the diet should be changed as little as possible before operation. If the operation is to be protracted, it is advisable to reduce the fats and increase the carbohydrates. Giving 0.6 to 1.2 grm. of bicarbonate of soda two hours before the operation is of advantage. Cathartics should never be given unless the patient is in the habit of taking them. The patient should be carried to the anæsthetizing room and not allowed to walk. Quiet, but not absolute stillness, should be observed as soon as the anæsthetic is started. Morphine and atropine should usually be given, and sufficiently early to allow of their maximum action before the anæsthetic is started. The patient should be placed on the operating theatre in a comfortable position. The patient has discovered the position in which he sleeps most comfortably, and no preconceived ideas should interfere with his comfort. It is necessary to have the patient physically as well as mentally comfortable if a smooth induction is desired.

NEUROLOGY.

(68) The Gluteal Sign in the Diagnosis of "Sciatica."

Felix Rose (*Medical Press*, October 9, 1918) alludes to the extreme frequency of "sciatica" among British troops, pointing out that it is a disease which is easily simulated, and that many cases are met with in which it is difficult to make a satisfactory diagnosis. He then describes an easily elicited clinical sign, which he has found in the great majority of cases of true sciatic neuralgia and traumatic irritation of the nerve trunk. He calls it the gluteal sign. It consists of an exaggeration of the gluteal reflex on the affected side. To elicit the sign, the patient is placed flat on his abdomen and he is directed to relax all muscular tension of the buttocks. The practitioner then taps lightly with the hammer ordinarily used in testing the tendon reflexes on the area corresponding to the lateral margin of the sacrum, from the second to the fourth of its constituent vetrebræ. The percussion thus applied produces in the muscular bundles of the *gluteus maximus* which are attached to those sacral segments, a fascicular contraction that is readily visible under the skin, and is obviously of a very different form from the globular contraction characterizing voluntary effort. The test should be carried out on both sides of the body. In every case in which this sign has been present Valleix points and the sign of Lésegue have co-existed. In these cases the sign has been noticed to disappear conjointly with the subsidence of the neuralgic pains. On the other hand, the sign has never been found in cases submitted with a diagnosis of sciatica, but really the subjects of contracture of the periarticular hip muscles.

(69) Comparative Study of Infantile Paralysis.

Bristol (*Journ. of Med. Research*, January, 1918) presents the epidemiology of infantile paralysis in the possible light of a widespread human pasteurellosis, in which the non-paralytic cases represent chiefly the digestive and respiratory forms of the disease and the paralytic cases the nervous form. The disease may be spread in a manner analogous to that of pasteurellosis in animals, either directly by contact with the fresh secretions or excretions of an infected individual, a healthy or diseased carrier, or indirectly by insect carriers, or perhaps in dust and uncooked food or drink. The great variation in virulence of the various bipolar bacilli must be taken into account. Thus, bipolar bacilli, most virulent for one species of animal, may cause similar symptoms in other species, though not with the same virulence. In such event it may be that sporadic cases, and small and local outbreaks, might have their origin in lower animal reservoirs, but that severe and widespread epidemics and increasing prevalence of the disease are to be explained by a passage of the human strain of the organisms from person to person and with a steadily increasing virulence.

(70) Familial Progressive Muscular Atrophy.

A. S. Hamilton (*Journ. of Nerv. and Ment. Dis.*, August, 1918) mentions that the Werdnig-Hoffmann form of familial progressive muscular atrophy of childhood has been described so frequently, both clinically and pathologically, that it may be taken as a definite type. In adults, on the other hand, the discrepancies in the clinical findings and the lack of pathological studies determining whether the atrophy is really of myelogenous production leaves the status of ordinary progressive muscular atrophy in doubt. Hamilton's case, here recorded, is important on account of the striking family history. The patient's mother, two of his mother's sisters, members of a family of nine, and his maternal grandmother, all apparently suffered from the same disease as the patient. Clinically the case was undoubtedly one of progressive muscular atrophy, not a dystrophy (by some it might have been labelled amyotrophic lateral sclerosis on account of the persistent knee-jerks); and anatomically profound changes were found in the muscles, anterior spinal nerve roots and anterior cornua, but not in the brain. It is to be noted, however, that the cortex of the motor area was not specifically examined. The literature on the subject is annotated and discussed, and one plate illustrates the microscopical changes.

(71) The Pathology of Poliomyelitis.

H. S. Howe (*Journ. of Nerv. and Ment. Dis.*, August, 1918) thoroughly examined the nervous tissues from sixteen human cases of acute poliomyelitis (American epidemic, 1918) and from a series of inoculated monkeys and lower animals, and gives a full description of the changes found. While these seem not to differ from those described by others, he makes a point of distinguishing between the changes in the tissues of mesodermic and ectodermic origin, that is the blood vessels and connective tissues on the one hand and the nerve cells on the other. He sees little histological evidence of definite correlation between the inflammatory reactions manifested by these two tissues. "It is beyond dispute that in experimental poliomyelitis many instances show an inflammatory reaction wholly restricted to the cells of ectodermic origin." Similarly, "in a few human cases there is such a preponderance of the reaction in the ganglionic cells as to make the connective tissue changes almost negligible." He thinks that there are three forms of inflammatory reaction. "(1) The predominately ectodermogenic type, in which the reaction is confined almost exclusively to changes in the ganglionic cells and further characterized by the inconspicuous alterations in the cells derived from the mesoderm. (2) the predominately mesodermogenic type, in which the reaction is confined almost exclusively to changes in the tissues derived from the mesoderm and further characterized by almost negligible changes in the ectodermogenic tissues. (3) The mixed type, in which the reaction is manifested by changes in both the mesodermogenic and the ectodermogenic tissues." The paper is illustrated by many excellent microphotographs and details of cases are given, but the argument is brief.

(72) The Prognosis After Nerve Suture.

Meige, André Thomas, Mme. Dejerine, Charpentier, Tinel, Sicard and Haliprê, at a meeting of the Paris Neurological Society (*Revue. Neurol.*, No. 3 and 4, 1918), discussed the question as to how many months after a nerve suture hope of recovery was to be abandoned, and arrived at these conclusions. Cases of nerve suture could be divided into two classes: (1) those in which there were no recognizable signs of repair, motor or sensory; (2) those in which the recognition of certain signs (motor, sensory or electrical) allowed the prediction of a partial or complete recovery. Regarding the first class of case, it can only be said in a general way that they cannot be pronounced incurable until two years from the date of suture have elapsed. During this period of waiting, the patient should receive suitable after-treatment and be examined several times by the same neurologist. Regarding the second class of case it is also impossible to state in advance how long it will be before any given case can be looked upon as incurable. Such cases should be after-treated in the neurological centre or hospital where the suture-operation was performed, and the officers of that hospital alone could determine when all progress was arrested and hope of cure was to be abandoned.

(73) The Pathogeny of Homolateral Hemiplegia.

Demole (*Revue Neurol.*, Nos. 3 and 4, 1918) considers the pathogeny of those hemiplegias, called collateral or homolateral, which over very many years have attracted attention, but whose origin is still imperfectly understood, and illustrates his thesis with a case of cerebral tumour. Clinically, in a brief illness, the patient presented a left-sided Babinski reflex and a paralytic deviation of the head and eyes to the right, symptoms which pointed to a lesion in the right hemisphere; whereas the autopsy revealed a large tumour in the left frontal lobe. To explain such paradoxical symptoms, which are frequent in cases of cerebral tumour and abscess and in subdural hæmatoma, Demole discards other theories, such as the distant action of œdema, pressure on the *crus cerebri* and the "diaschisis" of Monakow, and maintains that the cardinal factor is indirect pressure upon or irritation of the hemisphere opposite to the lesion by the enlarged, affected hemisphere. This irritation or pressure falls with greatest intensity upon the region of the internal capsule, and does so because it is directed thereto by the aperture in the *falx cerebri*, which structure anatomically forms a rigid barrier to pressure in other directions. The symptoms are thus explained on simple facts of anatomy and mechanics.

British Medical Association News.

ANNUAL MEETING.

The annual meeting of the Tasmanian Branch was held at Hobart on January 28, 1919, Dr. D. H. E. Lines, the President, in the chair.

Annual Report.

The Honorary Secretary presented the annual report of the Council, as follows:—

ANNUAL REPORT OF THE COUNCIL FOR THE YEAR 1918.

Membership.

The Branch has now a membership of 67. Six were transferred to other Branches, two were transferred from other Branches and one was elected.

Meetings.

There were fourteen general meetings during the year, and the average attendance was eleven.

It is to be regretted that, owing to the difficulties the Branch has experienced in its struggle with the Government in regard to hospital affairs, there was no time at these meetings to devote to other than medico-political matters.

The Council met forty-six times, there being an average attendance of six. The attendance was as follows:—

Honorary Secretary	45
President	38
Dr. Sprent	38
Dr. Butler	36
Dr. Giblin	35
Dr Sprott	31
Dr. Hayward	29
Dr. Clarke	24
Dr. Hogg	1
Dr. Gollin	0

The report was received.

Financial Statement.

The Honorary Treasurer presented the balance sheet, as below:—

The balance sheet was received.

Presidential Address.

Dr. D. H. E. Lines then read an address before vacating the chair. The text of the address will be found on page 145 of this issue.

Election of Office-Bearers.

The following were declared elected as office-bearers and members of the Council for the ensuing year:—

President: Dr. W. W. Giblin.
President-Elect: Dr. J. Sprent.
Vice-President: Dr. R. G. Scott.
Honorary Treasurer: Dr. A. E. Hayward.
Honorary Secretary: Dr. E. Brettingham-Moore.
Members of Council: Drs. T. C. Butler, G. H. Hogg, D. H. E. Lines and G. Sprott.

BALANCE SHEET OF THE TASMANIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

Cr.

	£	s.	d.
January 1, 1918—			
Balance in Hobart Savings Bank	94	15	6
Bank Interest	2	13	11
March 12, 1918—			
Grant from Medical Defence Union	12	12	0
Members' Subscriptions to Branch	168	8	0
Contributions by 31 Members to Special Fund	63	15	0
Capitation Grant for Two Members from Head Office	0	8	0
	£342	12	5

Examined and found correct,
GEO. WATSON.

Dr.

	£	s.	d.
January 7, 1918—			
Transferred to Petty Cash Account	1	0	0
Paid *The Medical Journal of Australia*, to January 3, 1918	12	10	0
Paid British Medical Association, Head Office, to January 3, 1918	66	3	0
January 16, 1918—			
Paid Honorary Secretary, for Petty Cash	2	10	0
February 1, 1918—			
Paid Murdoch, Jones & Cuthbert, Solicitors	24	12	9
Paid Baker for Transcipt of Annual Meeting	2	2	0
March 19, 1918—			
Paid *The Medical Journal of Australia*, Printing List of Members	0	13	8
April 20, 1918—			
Paid G. A. Hogarth, Reporting Conference	6	16	8
April 23, 1918—			
Paid *The Medical Journal of Australia*, to April 23, 1918, and 1s. exchange	27	11	0
September 10, 1918—			
Paid Honorary Secretary for Petty Cash	2	10	0
December 2, 1918—			
Paid *The Medical Journal of Australia*, to November 26, 1918, and 1s. exchange	32	1	0
October 4, 1918—			
Paid Federal Committee Contribution, 65 Members at 6d.	1	12	6
October 5, 1918—			
Paid Walch for Letter Books	1	13	6
December 11, 1918—			
Paid Royal Society of Tasmania, Rent of Room for 1918	10	0	0
Paid Mr. Arnold, Caretaker of Room	2	10	0
December 18, 1918—			
Paid *The Medical Journal of Australia*, Reprints	1	7	0
Paid G. A. Hogarth for Report of Rattan Commission	14	4	0
December 31, 1918—			
Paid Honorary Treasurer, Postage, Petty Cash Account	1	13	0
Paid Honorary Secretary for Petty Cash	3	11	11
Cash in Hand	6	9	8
Cash in Hobart Savings Bank	121	0	9
	£342	12	5

Richard Stewart Roy Mitchell, Esq., M.B., Ch.M. (1918, Univ. Sydney), of Lewisham Hospital, Lewisham, Dudley de la Force Henry, Esq., M.B., Ch.M. (1918, Univ. Sydney), of 64 Kensington Road, Summer Hill, New South Wales, and William Henry (Wilfred H.) Cook, Esq., M.B., Ch.M. (1918, Univ. Sydney) of Sydney Hospital, have been nominated for election as members of the New South Branch.

Leonard J. Hartnett, Esq., M.B., Ch.B. (Melb., 1918), of Pascoe Vale Road, Moonee Ponds, has been elected as a member of the Victorian Branch.

Naval and Military.

HONOURS.

The following details concerning the awards to various members of the Australian Army Medical Corps have been published in the *London Gazette* in September, October and November:—

Distinguished Service Order.

Major Frederick Neill Le Messurier, Australian Army Medical Corps. He was continuously in the front line during both stages of an attack, assisting in collecting and arranging for the prompt disposal of the wounded to the rear. He behaved splendidly, and by his untiring efforts and a complete disregard of his own safety he greatly assisted the brigade throughout.

Lieutenant-Colonel Arthur Mitchell Wilson, Australian Army Medical Corps. While in charge of bearer divisions during an attack he followed close on the heels of the infantry into captured villages, establishing bearer posts, and effected the evacuation of the wounded with remarkable rapidity. He worked splendidly throughout, and by his untiring devotion to duty saved a number of lives.

Major James Beverley Metcalfe, M.C., 10th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty. In a village under heavy bombardment of gas and high explosives, this officer, with practically no protection, tended the wounded for four and a half hours. When the advanced dressing station had been moved to a new site, he remained with four men, evacuating odd cases which continued to come in, until two shells came right into the dressing-room, severely wounding him. His cheerfulness and coolness throughout encouraged all around him.

Major Leslie Gemmel Tassie, 13th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty. This officer set a fine example of coolness in going about amongst his stretcher-bearers, directing and encouraging them. Day and night he visited the regimental aid post and loading posts, rearranging bearer relays and supervising the evacuation of the wounded. Hearing there were several wounded in a village which was being heavily shelled, he organized parties and cleared the village.

Military Cross and Bar.

Captain Frank William Fay, 14th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty while in charge of the transport and evacuation of wounded from the divisional main dressing station. The station was twice hit by shells, but he succeeded in clearing all wounded, exposing himself in bringing up ambulance cars and showing great energy and devotion to duty.

Captain Frank William Fay, M.C., Australian Army Medical Corps. He was in charge of motor ambulances during an attack, and before moving them forward he reconnoitred the roads at considerable risk in his car. He remained on duty continuously for four days, exploring each route and opening up new tracks for each successive advance. By his untiring zeal and devotion to duty he enabled the evacuation of the wounded of two divisions to be smoothly continued. (M.C. gazetted September 16, 1918.)

Captain Vernon Carlisle Brown, M.C., Australian Army Medical Corps. For great courage and resource in evacuating wounded from a forward area. The routes were being heavily shelled, and he established bearer relay posts in suitable positions after a full reconnaissance of the ground. During the whole operation his perseverance and initiative contributed largely to a quick evacuation of the wounded, while his energy and example stimulated the men. (The award of the Military Cross appeared in *London Gazette*, No. 30389, 1917.)

Military Cross.

Captain Algernon George Rowley Lilford, Australian Army Medical Corps. He remained at his post under gas shell and high explosive bombardment, which exploded gas shells near by. His cool example and energy caused the successful evacuation of patients and saved many lives.

Captain Donald Walter McCredie, Australian Army Medical Corps. His battalion was practically isolated for two days, during which he tended wounded under fire. He continually crossed machine-gun swept spaces, after stretcher-bearers had been shot down, to attend wounded. Throughout he showed untiring energy and devotion to duty, and by his fine conduct saved many lives.

Captain Ewing George Thomson, 10th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty. This officer tended the wounded in the open from 4 a.m. to 11 a.m. one morning. During this period he was under very heavy high explosive and gas bombardment, but, although suffering from the effects of gas, he stuck to his aid post. His rapidity in evacuating wounded from the gassed area no doubt saved many.

Captain Geoffrey Penrose Arnold, 13th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty. During a night counter-attack this officer formed his regimental aid post in the open just in front of the jumping-off line, and continued to dress wounded there for twenty-four hours, under continuous fire. The medical officers of two other battalions both became casualties early in the attack, and he attended to the wounded of those battalions besides his own. His coolness and splendid work saved scores of lives.

Captain Ernest Noel Brougham Docker, 13th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty during an attack. He followed up with his bearers, picked up guides, gained touch with the regimental aid posts, and organized a line of bearer relays. This was done at night under machine-gun and heavy shell fire.

Captain James Iver McIver Chirnside, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty while attending to wounded men under heavy shell and machine-gun fire. During the retirement of the rearguard squadron he attended to the wounded while the enemy were firing at a distance of 300 yards. He showed great devotion to duty.

Captain Hugh Compson Trumble, 4th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty. Under heavy enemy barrage he pushed forward some 600 yards with his medical *personnel* to a ledge, where, by his capable organization, he successfully evacuated quantities of wounded. He worked for three days and nights, and his quiet courage had an excellent effect on wounded and stretcher-bearers alike.

Captain John Eric McGlashan, 14th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty in charge of the evacuation of wounded during an attack. He visited his various posts under heavy shell and machine-gun fire, and was largely responsible for the successful evacuation of the wounded.

Captain Isaac Manly Barrow, Australian Army Medical Corps. Under heavy fire he dressed wounded in an open trench, and when the battalion attacked he advanced with them and established his dressing-

station behind the front line. When two of his bearers were wounded carrying a casualty he dashed forward under direct machine-gun fire to their assistance. Later he was seriously wounded. Throughout the operations he showed conspicuous gallantry and devotion to duty.

Captain George Albert Blumer, 4th Field Ambulance, Australian Army Medical Corps. For conspicuous gallantry and devotion to duty. When the R.A.P. was heavily shelled, a direct hit causing casualties amongst the staff, he succeeded, single-handed, in getting the wounded away, and attended to many cases in the area of the bombardment. Throughout the period his courage and determination saved many lives.

It has been announced that Major Valentine O. Stacy, Australian Army Medical Corps, has had conferred upon him by the President of the French Republic the *Légion d'Honneur, Croix de Chevalier* for distinguished services rendered during the course of the campaign.

The following awards have been announced:—

Distinguished Service Order.

Major Douglas Dunbar Coutts.
Patrick Joseph Francis O'Shea, M.C.
Major Leonard May, M.C.

Bar to Military Cross.

Captain Kenneth Arthur McLean, M.C.
Captain Cedric Murray Samson.
Captain John Shaw Mackay, M.C.

Military Cross.

Captain Edwin Thomas Cato.
Captain James Mann Henderson.
Captain Kenneth Claud Burnell.
Captain Allan Melrose Purves.
Major William James Ellery Phillips.
Captain John Claude Moseley Harper.
Captain Frederic Hobart James.
Captain Christopher Norman Matheson.
Captain Archibald Lang McLean.
Captain Alexander Paterson Murphy.
Captain Reginald Edward Nowland.

APPOINTMENTS.

The following appointments, etc., have been announced in the *Commonwealth of Australia Gazette*, Nos. 18 and 24, of February 6 and 13, 1919:—

Australian Imperial Force.

First Military District.

Captain H. S. Bush, Operating Surgeon, No. 1 Team, 1st Australian General Hospital, to be Surgical Specialist, 3rd Australian Casualty Clearing Station, and to be temporary Major whilst so employed. Dated 17th October, 1918.

Army Medical Corps.

To be Captains—

John Williams Ford. Dated 16th December, 1918.
Honorary Captain H. A. Sweetapple. Dated 23rd December, 1918.
Gordon Harold Pfeiffer. Dated 27th December, 1918.
Henry Charles Barry. Dated 27th December, 1918.
Walter Henry Steel. Dated 31st December, 1918.
Leonard Hartnett. Dated 17th January, 1919.
Mitchell Henry O'Sullivan. Dated 21st January, 1918. (This cancels notification regarding Michael Henry O'Sullivan published in Executive Minute No. 99/1918, promulgated in *Commonwealth of Australia Gazette*, No. 15, dated 7th February, 1918.)
Captain H. E. Browne, Australian Army Medical Corps Reserve. Dated 19th December, 1918.

To be Major—

Captain H. E. Browne, Army Medical Corps, Australian Imperial Force. Dated 25th January, 1919.

APPOINTMENTS TERMINATED.

The following appointments have been terminated:—

First Military District.

Lieutenant-Colonel G. W. Macartney. Dated 20th February, 1919.
Major W. R. Kelly, D.S.O. Dated 22nd February, 1919 (?).
Captain A. B. Steele. Dated 27th January, 1919 (?).

Second Military District.

Lieutenant-Colonel H. L. St. V. Welch, D.S.O. Dated 20th February, 1919 (?).
Major C. C. Ross. Dated 23rd January, 1919 (?).
Major F. McIntyre, M.C. Dated 11th March, 1919 (?).
Major D. S. Mackenzie, D.S.O. Dated 3rd February, 1919.
Major F. C. Curtis-Elliott. Dated 28th January, 1919.
Captain G. C. Harper. Dated 29th January, 1919 (?).
Captain C. S. Renwick. Dated 3rd February, 1919 (?).
Captain H. C. Adams. Dated 30th January, 1919.
Captain E. H. Loxton. Dated 4th February, 1919.

Third Military District.

Major I. Blaubaum. Dated 23rd December, 1918.
Major J. I. McI. Chirnside, M.C. Dated 24th September, 1918. (This cancels notification concerning this officer which appeared in Executive Minute No. 772/1918, promulgated in *Commonwealth of Australia Gazette*, No. 171, dated 31st October, 1918.)
Captain O. Joynt. Dated 13th December, 1918.

Fourth Military District.

Captain L. G. Muirhead. Dated 29th January, 1919.

Australian Naval and Military Expeditionary Force.

APPOINTMENTS TERMINATED.

The following appointments have been terminated:—

Second Military District.

Captain H. V. Gillies. Dated 20th December, 1918.

Fourth Military District.

Captain A. C. Magarey. Dated 28th January, 1919.

Australian Military Forces.

First Military District.

Australian Army Medical Corps Reserve—

Honorary Captain P. G. McReddie to be transferred from the Australian Army Medical Corps Reserve, Second Military District. Dated 1st January, 1919.

Second Military District.

Australian Army Medical Corps Reserve—

Honorary Captain P. G. McReddie is transferred to the Australian Army Medical Corps Reserve, First Military District. Dated 1st January, 1919.

Third Military District.

Australian Army Medical Corps—

Honorary Captains R. H. Ebsworth and J. R. Davies to be transferred from the Australian Army Medical Corps Reserve, and to be Captains (provisionally). Dated 1st July, 1918.

The notification respecting the transfer of Captain J. L. Jona to the Australian Army Medical Corps Reserve, which appeared in Executive Minute No. 594/1918, promulgated in *Commonwealth of Australia Gazette*, No. 135, dated 29th August, 1918, is amended to read Captain J. Jona.

GRANT OF HONORARY RANK.

The undermentioned, who have served in the Australian Imperial Force as commissioned officers, being appointed to the Australian Army Medical Corps Reserve (temporarily), and being granted honorary rank equivalent to that held by them in the Australian Imperial Force:—

Officers who, on appointment for active service outside Australia, were not serving in the Australian Military Forces.

Second Military District.

To be Honorary Major—

C. C. Ross. Dated 14th November, 1916.

To be Honorary Captains—

G. C. Harper. Dated 1st March, 1916.
C. S. Renwick. Dated 1st March, 1918.

Third Military District.

To be Honorary Majors—

I. Blaubaum. Dated 24th August, 1917.

J. I. McI. Chirnside, M.C. Dated 1st July, 1918. (This cancels notification regarding this officer which appeared in Executive Minute 779/1918, promulgated in *Commonwealth of Australia Gazette*, No. 179, dated 14th November, 1918.)

To be Honorary Captain—

N. R. Mathews, M.C. Dated 11th April, 1916.

The undermentioned, who have served in the Australian Imperial Force as commissioned officers, having the rank held by them in the Australian Imperial Force confirmed as honorary rank in the Australian Military Forces, as follows:—

Officers who, on appointment for active service outside Australia, were serving and are now serving in the Australian Military Forces.

Second Military District.

To be Honorary Major—

Captain F. McIntyre, M.C., Australian Army Medical Corps. Dated 14th November, 1916.

Third Military District.

To be Honorary Lieutenant-Colonel—

Captain E. T. Brennan, D.S.O., M.C., Australian Army Medical Corps. Dated 19th September, 1917.

Correspondence.

THE EFFICIENCY OF MEDICAL PRACTITIONERS.

Sir,—Your leader in a recent number of the *Journal* regarding the advisability of a more thorough training of the medical student in the practical and scientific parts of the curriculum must command the support of everyone concerned with the efficiency for thorough and scientific work of the graduates of our medical schools. But there is another aspect of the subject with which you did not deal. What of the man already in practice? Having been registered by virtue of a medical qualification anything up to fifty or more years old, is it right and fair to the public, who trust us in this matter, to allow such a practitioner to go on with methods which modern medicine teaches us are wrong, and at the same time to allow him to ignore the most urgent teachings of modern medicine and surgery? At the present time, apparently any registered medical practitioner, who has sufficient conceit, self-confidence or effrontery, can set himself up as a specialist in any branch of medicine or surgery, irrespective of his personal or professional qualifications. And his failures are buried, and rarely, indeed, do the causes of failures leak out. I think it is up to the medical profession to put its house in order. If an independent tribunal, composed wholly of medical men, were appointed to enquire into every death reported, I feel sure that a great good would be done for the great body of conscientious and competent medical practitioners, and at the same time the general public protected against some whose whole armamentarium is bluff, combined with a strong and unscrupulous desire for gain.

Yours, etc.,

J. LEON JONA.

Melbourne, February 12, 1919.

THE INFLUENZA EPIDEMIC.

Sir,—I am writing with a view to eliciting information in regard to several points in connexion with the present epidemic of influenza.

(*i.*) It is generally assumed that there is no danger of contact except from person to person. In view of the present trend of scientific opinion towards the idea that, in addition to those germs already discovered, there is possibly a filter passer, perhaps ultra-microscopic, and in view of the fact that infection is carried by clothes and disseminated from infected places by scarlet fever, does the idea of a filter carrier still carry with it a rejection of clothes infection?

(*ii.*) Have any means of treating the toxic cases by intravenous injection been tried, and, if so, have they had any result?

(*iii.*) Is it possible that germs which we know, may have their own parasites, causing rapid dissolution of their bodies and the absorption of their endotoxins with their parasitic germ on contact with moist mucous surfaces?

(*iv.*) Are any statistics available from America, England or the continent showing the effect of inoculation to prevent or minimize the attack and of vaccine during the attack?

Any information of these points will be welcomed.

Yours, etc.,

"ENQUIRER."

February 13, 1919.

[(*i.*) The basis for the assumption that the causal organism of influenza is a filter-passed is (*a*) the experiments of Nicolle and Lebailly and (*b*) the experiments of H. Graeme Gibson, F. B. Bowman and J. I. Connor. According to the daily press, Rose Bradford, Bashford and Wilson are reported to have arrived at a similar conclusion. The medical profession, however, has learned to attach little or no importance to so-called scientific reports published in the daily press. The Medical Research Committee of the National Health Insurance in Great Britain have expressed the opinion that the assumption of a filter-passer as the causal organism of influenza represents "a cloak of ignorance." They frankly admit that the true virus of the disease is still unknown. The Royal College of Physicians of London emphasized in November, 1918, that they were uncertain of the primary cause of influenza. They held the view that this unknown virus was easily destroyed, that the infection was disseminated through the air for considerable distances in coughing, sneezing and even talking in the form of a fine spray and that the risk of conveyance of infection by the fingers should be constantly remembered, and that the hands should be washed at once after contact with a patient. It is quite clear, therefore, that the Council of the Royal College of Physicians hold that clothes, skin, hair and other objects may be infected by the sprayed sputum or saliva, and that this infection may be transferred to the mucous surfaces through the agency of the fingers. Although no information is available as to the length of time the unknown virus may survive outside the human body, the experience in the various laboratories throughout the world would suggest that a survival of several hours is probable. In these circumstances, we would not be justified in ignoring the possibility of the dissemination of infection in the indirect manner described above.

(*ii.*) The Council of the Royal College of Physicians state that

> no drug has yet been proved to have any specific curative effect on influenza, though many are useful in guiding its course and mitigating its symptoms.
>
> In the uncertainty of our present knowledge, considerable hesitation must be felt in advising vaccine treatment as a curative measure.

From the article appearing in the present issue it will be gathered that Drs. Fitchett and Bowie, after an extensive experience in Dunedin, have found vaccines useless, the serum from convalescent patients of doubtful value and intravenous injection of eusol inadvisable. Various American physicians have employed antiseptics by intravenous injection, but, as far as we are aware, have discarded this method as of no value.

(*iii.*) The suggestion raised in the third question is certainly ingenious. The view held by the majority of bacteriologists and bio-chemists at the present day is that the dissociation of bacterial proteins is a fermentative process, and that the ferments are derived from the tissue cells, and especially from the leucocytes.

The toxæmic symptoms in infections due to organisms such as the pneumococcus are probably due to the absorption of a foreign protein and of its dissociation products. The assumption that an endotoxin has a specificity similar to that of a true bacterial toxin lacks scientific support.

(*iv.*) Satisfactory statistics concerning the prophylactic value of vaccines are not available. In Massachusetts a committee was appointed to investigate and report on the prophylactic and therapeutic value of vaccine. The members of this committee were Drs. M. J. Rosenau, F. P. Gay and W. McCoy. This committee recorded the opinion that the incidence of the disease was somewhat smaller among the

vaccinated than among the unvaccinated. The statistical evidence on which these conclusions were founded are unfortunately not available. The same committee found that the vaccines had no specific value in the treatment of the disease. A second committee of investigation appointed in the same State arrived at almost identical conclusions. The records from the various military camps in America provide some evidence in this connexion, although it must be admitted that it is not of a very conclusive character. It appears that at Camp Dix inoculation with a pneumococcal vaccine was carried out persistently. Notwithstanding these inoculations, there were 6,000 cases, with 800 deaths. Approximately one-third of the patients "showed frank signs of pneumonia."

No statistical information is included in the publication of the Medical Research Committee, which deals with the continental literature up to September, 1918. The Council of the Royal College of Physicians, after having considered all the published figures, came to the conclusion that no form of inoculation could be guaranteed to protect against the disease itself. The Council expressed a guarded opinion as to the power of vaccine to protect against severe complications. We have referred in a previous issue to the warning given editorially in the *Journal of the American Medical Association* against the assumption that vaccines had been proved to exercise prophylactic power. In the *Journal of the Canadian Medical Association* the following arguments are used to counteract the exaggerated claims made on behalf of sera and vaccines in the daily press: (1) The nature of the infection, as well as its extreme virulence in many cases, is still obscure. (2) In the majority of the cases a mixed infection is present, in which more than one micro-organism is concerned. (3) If the influenza bacillus plays an ætiological rôle, not much hope can be entertained in establishing immunity, since this bacillus has only feeble protective qualities. (4) It is very doubtful whether any immunity is conferred by an influenza infection in the human body.

In regard to the alleged curative properties of vaccines, it may be stated that the mortality rate in the American military camps in which vaccines were employed, was certainly not lower than the mortality rates in those camps in which vaccines were not employed.

Finally, we may state that we have endeavoured to ascertain whether better results were obtained in large numbers of patients with one form of vaccine as compared with another. Our search of the literature has been singularly sterile. A few authors have claimed striking results from the use of pneumococcal vaccines, given in doses of 6,000,000,000 to 9,000,000,000 cocci. Unfortunately, these records deal with very small numbers of patients. The authors are insistent on the necessity of employing exclusively the same type of pneumococcus as that infecting the patient. It would seem that in America, at all events, the inclusion of Pfeiffer's bacillus in the vaccine is becoming increasingly rare.]

Sir,—A series of articles in the *Sun* which have recently appeared under the name of Professor David Welsh must furnish my excuse for this letter. As they are written with the knowledge that an "experiment" on a large scale, an experiment, forsooth, which has never been conducted on a community of some considerable size before, and as this experiment is not altogether devoid of danger, and is doomed to fail in its avowed objects, it is surely time that some member of our profession should at any rate enter a protest against its continuance.

The experiment is one designed with the object of keeping at bay an epidemic which is already in our midst and which may assume a widespread and even virulent character.

I wish first of all to say something about the epidemic itself and then to discuss some of the methods at present being adopted to check its advent and progress.

The Epidemic and Its Cause.—Under this heading I wish to take into account (*a*) the world-wide epidemic (pandemic) and (*b*) the epidemics at present active both in New South Wales and Victoria.

Of a discussion of the published happenings I am not at present desirous of saying anything. It is merely with the scientific and practical bearings of the medical methods adopted to stay its progress that I am concerned now.

(*a*) *The World-Wide Epidemic.*—We are told that the epidemic took its origin in Spain; but this matter need not detain us. Suffice it to say that Spain was not as a country actually and actively engaged in the European war, and we may presume that the population was not so harrassed mentally and physically as were the populations of the countries actively participating. We are told that the epidemic as it first appeared in Spain was, though very extensive as regards incidence, of a somewhat bland and non-virulent character. From Spain it spread to the shell-shocked and exhausted troops of Europe, and there it assumed more virulent character.

Now experience has shown that, after great wars, widespread and often virulent epidemics arise. The epidemic is one in which the respiratory tract is involved and the causal organism or organisms gain access to the afflicted by way of the nose and mouth. At first it was spoken of as influenza because the *Bacillus influenzæ* (Pfeiffer) was found associated with it. From Spain it entered the war area, and thence by the shipping routes it spread to England, thence to North America and Africa, and thence to New Zealand. As it spread, as scientists were prepared to expect, it gained in virulence.

It is well known that when an infection becomes implanted in a soil which is rendered susceptible by such conditions as fright, worry, emotional disturbances of all kinds and exhaustion, it invariably gains ground rapidly and acquires more malignant properties. It is because the natural resistance to infection has been undermined by such conditions as those above mentioned that the causal organisms are able to get a more secure footing in the bodies of their victims.

The disease ultimately reached South Africa and New Zealand, and from what we are told it exhibited malignant properties in both these countries.

Now for a few words as regards the cause or causes of the epidemic. Reading the record so far written of those who have investigated the disease, it appears that quite a number of different organisms have been found associated with this infection. To enumerate some: the *Bacillus influenzæ* (Pfeiffer), the pneumococcus, a form of streptococcus, the *Staphylococcus pyogenes aureus*, the *Micrococcus catarrhalis*, together with Gram-negative bacilli and diplococci. These are the more common of the organisms associated with the outbreak, but others, for instance, the *Bacillus aerogenes capsulatus*, and various types of the proteus group, have been described by some observers as being occasionally represented. Some observers have detected the *Bacillus influenzæ* so infrequently that doubt has been raised as to its causal connexion. The vast majority of observers, however, are agreed that the pneumococcus is present in all cases, and that the infection is frequently complicated by pneumonia.

For many years it has been my practice, when examining sputa for suspected tubercular or streptothrical infection, to take note as a routine practice of the organisms found associated with them. The organisms that I have most frequently found are pneumococci, various types of staphylococci, streptococci, diplococci (both Gram-fast and Gram-negative) *Micrococcus catarrhalis* and Gram-negative bacilli, with occasional diphtheroids. These organisms, or at any rate the majority of them, are precisely those usually associated with epidemic catarrh (coryza) and pneumococcal catarrh. Specimens of the organisms separated from cases treated at North Head Quarantine Station were kindly supplied to me by Dr. Cleland, and they were, with the exception of the influenza bacillus, the same as those detected by me in my investigations on epidemic respiratory catarrh.

(*b*) *The Epidemic at Present Existing in New South Wales and Victoria.*—In comparing the outbreaks in these two localities one must, I think, bear in mind the physiographical peculiarities and the meteorological conditions distinctive of each of the two capital cities.

It is well known that epidemics of infective catarrh are most apt to supervene at the changes of the seasons and at times when, after spells of hot weather associated with a high degree of atmospheric humidity, sudden cold southerly (in the southern hemisphere) changes supervene.

Conditions of this kind have prevailed in New South Wales to a large extent throughout the whole of the present summer, and we have had in consequence mild outbursts of epidemic catarrh ever since September of last year.

Occasionally these outbursts have been of a somewhat

virulent type. I refer to the outbreak in Lithgow some months ago, during which a considerable number of deaths occurred in quite a short space of time.

These reputed outbreaks may yet turn out to have been rather providential, as they may have already partly immunized the population (by Nature's method) and may thus have rendered the population less likely to suffer from the more virulent type of the disease.

So far this view is borne out by the remarkably benign character of the outbreak in New South Wales up to the present time.

Now in Melbourne we have a large city built on a rectangular plan, with very wide streets, facing the cold blasts that come from the south polar regions, and with no friendly mountain barrier to check it in any way. It is by no means uncommon for periods of extremely hot, muggy weather in summer to be followed by periods of cold (the thermometer sometimes falling 40° or 50° in a short space of time) of some days' duration.

In Sydney, on the other hand, our southerlies in normal years come at fairly regular intervals; we get warning of them coming up the coast, and they do not penetrate far inland. Moreover, in Sydney the foreshores of the harbour indent the town itself and the harbour provides a "lung" which is not sufficiently realized when we consider our park spaces. This tends to keep the climate more equable. Moreover, we have in Sydney innumerable good surf-bathing beaches within easy access of the city and as these are fully availed of, they are no mean factors in keeping up the resisting powers of our population.

It is for these reasons among others that our seasonal respiratory catarrhs are of a milder character than those of Melbourne. This, however, is nothing for us to boast about; we are merely more fortunate in this respect and more liberally spoon-fed by Nature with facilities for keeping our bodily resistance at a high grade.

In my opinion the two epidemics which are now present in these two adjoining States are identical in origin and differ only in degree from one another by reason of the facts above stated.

And now a few words about the use of masks as a measure of prevention of spread of the disorder.

Professor Welsh tells us that an experiment upon a large scale, and one which has never before been applied to a whole community, is being conducted by the health authorities to keep out a visitation of the pandemic. That this experiment has his whole-hearted approval is obvious from his remarks in the *Sun* articles referred to.

It would appear that the excuse for such an experiment is the ascertained fact that if a person coughs or sneezes within six or eight feet of a Petri dish, containing a suitable nutrient medium, and the dish is then incubated *secundum artem*, the organisms associated with the infection will be found growing thereon. Also, that we have an additional excuse in that surgeons often wear masks to prevent the wounds they make becoming contaminated from the exhalation from their own respiratory tract, and that some physicians protect themselves from the infection of diphtheria and infective sore throats by a similar precaution. We must bear in mind that the masks are worn for a short time only and not over long periods continuously.

After wearing a mask faithfully for a day or two in such weather as we have recently experienced in Sydney, one soon finds that lack of energy, headache, sore throat, and a variety of other mild pathological conditions, indicate a lowering of vital force, a loss of resisting power. Is it wise, I ask, thus to lower the fighting power of the community? Surely it is opposed to common sense to do so, and especially with the possible prospect of a visit at any time from a malignant infection. Do we not take every precaution to ensure a supply of fresh air to our dwellings, and make provision for its removal by a system of ventilation? Why do we recommend patients suffering from chronic respiratory disease to lead the out-door life both day and night? Did we not abandon the closed system of ether administration because it was found to be occasionally associated with death from pneumonia some days after the administration.

Those of us who practise our profession, realize that one not only deals with disease but with the human factor in disease. It is not always wise to argue from the test tube and Petri dish to the human body.

By all means let us do our best to assist the authorities to keep the disease out, or to lessen its spread by such common sense methods as isolation, the wearing of masks by those who have to treat the infected, and by other authenticated methods of sanitation. But to assist in depriving the population of fresh air is hardly the province of our profession.

As a means of preventing the spread of the infection the mask has not proved itself so far very effective; witness the number of doctors and nurses wearing them who have already become infected.

A friend of mine told me the other day that I was not acting as a "good citizen" by opposing the wearing of masks. In reply I told him that I would consider myself a "bad citizen" were I to lend assistance to the spread of the disease by lowering the resistance of the community.

I must apologize, sir, for having taken up so much of your valuable space by this letter.

Yours, etc.,

SYDNEY JAMIESON.

Craignish, Macquarie Street, Sydney,
February 15, 1919.

Obituary.

ALEXANDER SMITH AITCHISON.

In a recent issue we announced the fact of the death of Alexander Smith Aitchison, of Albert Park, Melbourne, which took place on December 24, 1918. Alexander Smith Aitchison studied medicine at the University of Melbourne, and took his degree of Bachelor of Medicine in 1883 and registered in the State of Victoria in December of that year. In 1884 he took the degree of Ch.B.. His contemporaries speak of a very successful career as a student, and their claim finds support in the fact that shortly after graduation he was appointed House Surgeon to the Melbourne Hospital. After he had served his term of office he accepted the position of Resident Medical Officer at the Children's Hospital. Toward the end of 1885, or at the beginning of 1886, he started in practice in South Melbourne, and, in the course of the 23 years which followed, he built up on the foundation of a sound medical knowledge, excellent judgement, of sympathy with suffering and of a remarkable disinterestedness, one of the best practices in the suburbs of the Victorian capital. He was popular with his colleagues; respected and admired by all as a man of high principles and very kindly disposition. In these circumstances it is scarcely surprising that on many occasions he was selected Chairman of the South Melbourne and Port Melbourne Division of the Victorian Branch of the British Medical Association. When this society was being formed, the unanimous choice of President fell on Alexander Smith Aitchison. An intimate friend points out that when a dispute or misunderstanding arose among members of the medical profession in South Melbourne it became customary to ask Alexander Smith Aitchison to invite all the parties to the dispute to his house. This invariably resulted in the dissipation of the trouble. He was most charitable in his judgement of others, and the quiet reasonableness of the man soothed the irritated spirit of any practitioner who felt himself aggrieved.

He was an elder of the Presbyterian Church, and earned the very highest respect and affection of the late Dr. Meiklejohn, the Presbyterian minister. Ministers of other denominations held him in high regard, and many stories are told of his unfailing charity and generosity to the sick poor. On one occasion he not only attended to his patient unremittingly during life, but after death paid the funeral expenses. He married a sister of Dr. Melrose Mailer and Dr. Ramsay Mailer. After the birth of their third son his wife died, and it is said that he never recovered from the blow. For many years he drove a few miles every week to that lone spot where his beloved one lay buried. From the time of the death of his wife to the end of his life he was both father and mother to his three boys. At the funeral the tear-stained faces of his old patients bore eloquent testimony to the affection they had for a chivalrous gentleman.

Proceedings of the Australian Medical Boards.

NEW SOUTH WALES.

The undermentioned have been registered under the provisions of the *Medical Act, 1912 and 1915*, as duly qualified medical practitioners:—

Crowe, Henry Harold, M.B., Mast. Surg., 1918, Univ. Sydney.
Looney, Frank Harold, M.B., Bac. Surg., 1907, Univ. Melbourne.
Hickford, Julie Mary, M.B., Bac. Surg., 1918, Univ. Melbourne.

VICTORIA.

The undermentioned have been registered under the provisions of Part I. of the *Medical Act, 1915*, as duly qualified medical practitioners:—

Craig, Lindsay Walker, Children's Hospital, Carlton, *M.B. et* Ch.B., Melb., 1918.
Lewis, Jack Charles, "Mt. Pleasant," Champion Street, Middle Brighton, M.B. *et* Ch.B., Melb., 1918.
O'Keeffe, John Francis, St. Vincent's Hospital, Melbourne, M.B. *et* Ch.B., Melb., 1918.
Steel, Walter Henry, 19 Woolocott Street, Coburg, M.B. *et* Ch.B., Melb., 1918.

Names of deceased practitioners removed from the Register:—

Reid, William Alexander.
Siton, Miles Charles Cariston.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xiii.

Walter and Eliza Hall Institute of Research in Pathology and Medicine, Melbourne: Director and First Assistant.
Government on Tonga: Chief Medical Officer.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Friendly Society Lodges, Institutes, Medical Dispensaries and other Contract Practice. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Cloncurry Hospital.
TASMANIA. (Hon. Sec., Macquarie Street, Hobart.)	Medical Officers in all State-aided Hospitals in Tasmania.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., Health Department, Perth.)	All Contract Practice Appointments in Western Australia.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United Friendly Societies' Dispensary. Canterbury United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Friendly Society Lodges at Lithgow. Friendly Society Lodges at Parramatta, Auburn and Lidcombe. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. New South Wales Ambulance and Transport Brigade. Newcastle Collieries—Killingworth, Seaham Nos. 1 and 2, West Wallsend. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phœnix Mutual Provident Society.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

Feb. 25.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
Feb. 26.—Vic. Branch, B.M.A., Council.
Feb. 27.—S.A. Branch, B.M.A.
Feb. 28.—Queensland Branch, B.M.A., Council.
Mar. 4.—Tas. Branch, B.M.A., Council.
Mar. 5.—Vic Branch, B.M.A.
Mar. 7.—Q. Branch, B.M.A.
Mar. 11.—N.S.W. Branch, B.M.A., Ethics Committee.
Mar. 13.—Vic. Branch, B.M.A., Council.
Mar. 13.—N.S.W. Branch, B.M.A., last day for nomination of candidates for election to the Council.
Mar. 14.—S.A. Branch, B.M.A,, Council.
Mar. 14.—Q. Branch, B.M.A., Council.
Mar. 18.—Tas. Branch, B.M.A., Branch and Council.
Mar. 18.—N.S.W. Branch, B.M.A., Executive and Finance Committee.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.

The Honorary Librarian of the New South Wales Branch of the British Medical Association notes that the following numbers of *Surgery, Gynecology and Obstetrics* are missing from the library files:—

1915: August, October and December.
1916: February, April and November.
1917: March.

Members who have borrowed these journals, are requested to return them as soon as possible, to enable the completed volumes to be bound.